Spring 3-1-2008

Undergraduate and Graduate Course Descriptions, 2008 Spring

Wright State University

ACADEMIC_PERIOD_DESC	COURSE_IDENTIFICATION	COURSE_NUMBER	TITLE_SHORT_DESC	SUBJECT	SUBJECT_DESC	CREDIT_MIN	COURSE_TEXT_NARRATIVE	COURSE_LEVEL	SCHEDULE	SCHEDULE_DESC
Spring 2008	ABS701	701	Research Methods I	ABS	Applied Behavioral Science	4	Emphasis on research designs, testing hypotheses, and techniques for collecting data such as questionnaire formation, sampling, surveys, scaling, interviewing, and analysis of documents and records..	GR	LE	Lecture
Spring 2008	ABS702	702	Research Methods II	ABS	Applied Behavioral Science	4	Analysis and interpretation of data in social research, with emphasis on multivariate statistical techniques.	GR	LE	Lecture
Spring 2008	ABS703	703	Applied Methodology	ABS	Applied Behavioral Science	4	Addresses issues pertaining to the collection and analysis of data in various settings, for the purpose of program evaluation, policy analysis, and other applied objectives.	GR	LE	Lecture
Spring 2008	ABS751	751	Theoretical Foundations	ABS	Applied Behavioral Science	4	Focuses on theories of anomie, alienation, social disorganization, and social dysfunction that underline contemporary paradigms in the study of deviance, criminology, and criminal justice.	GR	LE	Lecture
Spring 2008	ABS752	752	Explaining Crime	ABS	Applied Behavioral Science	4	Study of contemporary theories of deviant behavior from both an institutional and social-psychological perspective, with emphasis on the relationship between social change and social disorganization.	GR	LE	Lecture

Spring 2008	ABS753	753	Seminar on Criminal Justice	ABS	Applied Behavioral Science	4	(Also listed as SOC 770). An investigation of the criminal justice system in the United States and its relation to deviant adult and juvenile behavior.	GR	LE	Lecture
Spring 2008	ABS775	775	Meth in Hlth Care Res&Ev	ABS	Applied Behavioral Science	4	Seminar in the design and methods used in health care research and evaluation. Emphasis on current and future areas of health care research and evaluation. Focus of seminar is on skill development.	GR	LE	Lecture
Spring 2008	ABS777	777	Independent Research	ABS	Applied Behavioral Science	1	Independent laboratory or field research under the sponsorship of a faculty supervisor. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	ABS779	779	Practicum in ABS	ABS	Applied Behavioral Science	2	On-site participation of students in selected behavioral science projects. Jointly supervised by faculty and on-site personnel. May be repeated once for credit.	GR	PR	Practicum
Spring 2008	ABS788	788	Graduate Seminar in ABS	ABS	Applied Behavioral Science	1	In-depth coverage of special topics in applied behavioral science. Topics vary. May be taken for a letter grade or pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	ABS789	789	Continuing Registration	ABS	Applied Behavioral Science	1	Continuing Registration.	GR	IS	Independent Study

Spring 2008	ABS798	798	ABS Graduate Project	ABS	Applied Behavioral Science	1	Practical Application of knowledge gained through student courses is applied to a capstone experience. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	ABS799	799	Graduate Thesis Research	ABS	Applied Behavioral Science	1	Research for the Master's degree thesis.	GR	IS	Independent Study
Spring 2008	ACC204	204	Accounting Principles I	ACC	Accountancy	4	Introduction to accounting for business enterprises. Includes analysis of the effect of transactions on financial position, preparation of financial statements, the recording process, and measurement issues and reporting requirements for assets.	UG	LE	Lecture
Spring 2008	ACC205	205	Accounting Principles II	ACC	Accountancy	4	Introduction to accounting for business enterprises. Includes analysis of the effect of transactions on financial position, preparation of financial statements, reports for managers, and financial statement analysis.	UG	LE	Lecture
Spring 2008	ACC207	207	Career Planning in Acctg	ACC	Accountancy	1	This course is designed to inform students of career opportunities in accounting, and what steps they need to take to achieve those opportunities.	UG	LE	Lecture

Spring 2008	ACC307	307	Intermediate Accounting I	ACC	Accountancy	4	Course examines financial accounting concepts and its application to complex problems in the measurement of balance sheet accounts, determination of net income and preparation of financial statements. Course emphasizes measurement and reporting of assets.	UG	LE	Lecture
Spring 2008	ACC308	308	Intermediate Acc II	ACC	Accountancy	4	Course examines financial accounting concepts and their application to complex measurement problems and the preparation of financial statements. A grade of C or better is required in ACC 307.	UG	LE	Lecture
Spring 2008	ACC309	309	Advanced Accounting	ACC	Accountancy	4	To study the accounting principles and techniques used to consolidate parent and subsidary companies at the date of combination and in subsequent periods. A grade of C or better is required in ACC 308.	UG	LE	Lecture
Spring 2008	ACC323	323	Management Accounting	ACC	Accountancy	4	Application of managerial accounting concepts and techniques to complex problems in manufacturing accounting and service firms.	UG	LE	Lecture

Spring 2008	ACC326	326	ACC Sys Design & Impl	ACC	Accountancy	4	Design and accounting database, modeling accounting transactions for database enviornment, use of CASE tools for database design, discussion of accounting ASP and use of web-based accounting packages.	UG	LE	Lecture
Spring 2008	ACC343	343	Federal Income Tax I	ACC	Accountancy	4	Considers the methodology of the federal income tax as it applies to individuals. Analysis of the determinants of taxable income and the tax liability including property transfers, recapture, passive activities and income characterization.	UG	LE	Lecture
Spring 2008	ACC423	423	Auditing	ACC	Accountancy	4	This course provides an overview of financial, operational and compliance audits. Key auditing concepts are introduced: materiality, risk assessment, audit objectives, evidence, internal control considerations, and computer assisted audit techniques.	UG	LE	Lecture
Spring 2008	ACC424	424	Accounting Seminar	ACC	Accountancy	4	Identification and analysis of issues in either auditing, management accounting, or financial accounting. Check department for topic in quarter. Writing intensive.	UG	LE	Lecture
Spring 2008	ACC424W	424W	Writing in ACC 424	ACC	Accountancy	0	Required writing component for ACC 424.	UG	LB	Lab

Spring 2008	ACC444	444	Federal Income Tax II	ACC	Accountancy	4	An introduction to the federal income taxation of business entities and owners. Considers state and local taxes and their impact on tax strategies. Introduction to the legal and ethical responsibilities of the tax practitioner.	UG	LE	Lecture
Spring 2008	ACC454	454	International Accounting	ACC	Accountancy	4	Examines comparative country practices and the international aspects of various accounting topics--financial and managerial accounting, social accounting, inflation accounting, auditing and taxation.	UG	LE	Lecture
Spring 2008	ACC477	477	Special Topics in ACC	ACC	Accountancy	1	Topics and prerequisites vary.	UG	LE	Lecture
Spring 2008	ACC478	478	Hon: Ind Study in ACC	ACC	Accountancy	2	Research in accounting for fulfillment of the Honors Program project requirement.	UG	IS	Independent Study
Spring 2008	ACC481	481	Internship in Accounting	ACC	Accountancy	4	One quarter, faculty-supervised internship in the areas of public, industrial, or governmental accounting. At the conclusion of the internship the student is required to submit a report based on a topic agreed upon between the student and the sponsoring faculty.	UG	IN	Internship

Spring 2008	ACC611	611	Financial Accounting I	ACC	Accountancy	4	Course examines measurement and reporting concepts and standards for business enterprises. Includes financial accounting concepts and the application of accounting principles for measurement of balance sheet accounts, income and the preparation of financial statements.	GR	LE	Lecture
Spring 2008	ACC612	612	Financial Accounting II	ACC	Accountancy	4	Course examines measurement and reporting concepts and standards for business enterprises. Course continues ACC 611 and emphasizes long-term liability and equity accounts, business combinations, and reporting by consolidated entities.	GR	LE	Lecture
Spring 2008	ACC613	613	ACC for Decision Making	ACC	Accountancy	4	Accounting concepts, techniques and accounting procedures for manufacturing and service enterprises. Application of accounting concepts to management decision making.	GR	LE	Lecture
Spring 2008	ACC614	614	Taxation	ACC	Accountancy	4	Considers the methodology of the federal income tax as it applies to individuals and business entities. Application of the mechanics of the federal income tax in computing taxable income and the tax liability.	GR	LE	Lecture

Spring 2008	ACC615	615	Accounting Systems	ACC	Accountancy	4	Use accounting systems to record business transactions and generate financial information. Assess the design, implement and evaluate controls for accounting systems. Course will include completion of one or more practice sets.	GR	LE	Lecture
Spring 2008	ACC616	616	Auditing and Assurance	ACC	Accountancy	4	This course is an introduction to professional standards for financial statements audits, emphasizing risk assessment and planning considerations, audit objectives, procedures, and reports. Other assurance services provided by CPAs are also addressed.	GR	LE	Lecture
Spring 2008	ACC642	642	Govt and NFP Accounting	ACC	Accountancy	4	Application of fund accounting concepts to governmental and not-for-profit entities. Includes accounting procedures and preparation of financial statements.	GR	LE	Lecture
Spring 2008	ACC741	741	Fin ACC Adv Topics/Resrch	ACC	Accountancy	4	A survey of accounting theory, standard setting and accounting procedures. Includes an intensive study of the balance sheet and income statement and the underlying accounting principles. Accounting research will be integrated throughout the course.	GR	LE	Lecture

Spring 2008	ACC743	743	Tax-Adv Topic/Research	ACC	Accountancy	4	Introduction to the methodology of tax research and the authoritative tax sources. Applications of research techniques in the analysis of special tax topics related to individuals, corporations, partnerships, estates and trusts.	GR	LE	Lecture
Spring 2008	ACC744	744	Attestation Top/Research	ACC	Accountancy	4	This course provides in depth coverage of professional standards and audit procedures applied to specific business processes, including statistical sampling techniques tests of controls, substantive tests of transactions and balances and analytical procedures.	GR	LE	Lecture
Spring 2008	ACC745	745	ACC & Info Technology	ACC	Accountancy	4	Advanced IT topics related to accounting professionals. Topics include the role of accounting information systems, the roles and responsibilities within the IT function, accounting databases, high-end accounting software, E-Commerce, and emerging IT tools.	GR	LE	Lecture

Spring 2008	ACC746	746	Analyzing Fin Statements	ACC	Accountancy	4	Analysis of financial statements emphasizing manipulation, covering usual financial statement items and special situations (e.g. M&A, retiremnt benefits, off-balance sheet financing). Focus on adjusting statements to better reflect a firm's true financial condition.	GR	LE	Lecture
Spring 2008	ACC747	747	Professional Issues Sem	ACC	Accountancy	1	This course is a review of professional certification examination requirements and study techniques.	GR	SE	Seminar
Spring 2008	ACC748	748	Ethics & Corp Governance	ACC	Accountancy	4	Provides students an understanding of sound corporate governance principles and an ability to apply professional ethics standards for accountants and an awareness of ethical dilemmas commonly faced by accounting professionals.	GR	LE	Lecture
Spring 2008	ACC750	750	Graduate Project in ACC	ACC	Accountancy	4	Student teams work with client organizations on accounting projects and present results to client personnel and a panel of accounting professionals.	GR	LE	Lecture
Spring 2008	ACC756	756	Business Valuation	ACC	Accountancy	4	This course covers the theoretical principles and practical techniques used to conduct effective valuations of closely held businesses.	GR	LE	Lecture

Spring 2008	ACC757	757	International Accounting	ACC	Accountancy	4	Study of accounting from an international perspective, concentrating on differential developments among various nations. Accounting problems of an international nature are analyzed.	GR	LE	Lecture
Spring 2008	ACC775	775	Accounting Internship	ACC	Accountancy	1	One quarter, faculty-supervised internship in the area of public, industrial, or not-for-profit accounting. Course requires written reports. Students may register for internship twice during their graduate programs. May be taken for letter grade of pass/unsatisfactory.	GR	IN	Internship
Spring 2008	ACC780	780	Special Topics in ACC	ACC	Accountancy	4	Titles vary. Seminar in accounting topic of current interest.	GR	LE	Lecture
Spring 2008	ACC781	781	Special Studies in ACC	ACC	Accountancy	1	Titles vary.	GR	LE	Lecture
Spring 2008	ACC789	789	Continuing Registration	ACC	Accountancy	1		GR	LE	Lecture
Spring 2008	AED431	431	Art and the Child	AED	Art Education	4	Understanding child growth and development through creative expression with emphasis on functions and procedures for art in the classroom. Includes curriculum implementation strategies. Experiences in art media appropriate to the elementary school and in-field observations of art in the schools.	UG	LL	Lecture/Lab Combination

Spring 2008	AED630	630	Independent Readings	AED	Art Education	3	Independent work that extends and amplifies students' knowledge of philosophy, aesthetics, and creative and mental growth as related to art teaching and art education curricula. Emphasis on current books, magazines, and research in art education.	GR	IS	Independent Study
Spring 2008	AED631	631	Art and the Child	AED	Art Education	4	Develops and understanding of child growth and development through creative expression. Emphasis is on functions and procedures of art in the classroom and experiences in drawing and painting. Emphasis on assessment and use of technology.	GR	LL	Lecture/Lab Combination
Spring 2008	AED638	638	Multi-Age Visual Arts Methods	AED	Art Education	4	Theoretical/practical methods of teaching multi-age visual arts. Integration of artistic and educational ideas into creative programs as continuum of issues and skills for the developing art education with mentorship by master teachers.	GR	LL	Lecture/Lab Combination
Spring 2008	AED770	770	Independent Study	AED	Art Education	1	Readings, project, participation/observation clinic experience, or other appropraite study on an independent basis. Work is supervised by an art therapy faculty member.	GR	IS	Independent Study

Spring 2008	AES121	121	The Air Force Today I	AES	Aerospace Studies	1	An introduction to USAF ROTC. Topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and communication skills.	UG	LE	Lecture
Spring 2008	AES121L	121L	Leadership Lab	AES	Aerospace Studies	0	Required laboratory for AES 121.	UG	LB	Lab
Spring 2008	AES122	122	The Air Force Today II	AES	Aerospace Studies	1	An introduction to the USAF ROTC. Topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and communication skills.	UG	LE	Lecture
Spring 2008	AES122L	122L	Leadership Lab	AES	Aerospace Studies	0		UG	LB	Lab
Spring 2008	AES123	123	The Air Force Today III	AES	Aerospace Studies	1	An introduction to USAF ROTC. Topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and communication skills.	UG	LE	Lecture
Spring 2008	AES123L	123L	Leadership Lab	AES	Aerospace Studies	0		UG	LB	Lab

Spring 2008	AES221	221	The Air Force Way I	AES	Aerospace Studies	1	A survey course facilitating the transition from Air Force ROTC cadet to ROTC candidate. Featured topics include: Air Force heritage, leaders, Quality Air Force, ethics and values, leadership, group leadership problems, and application of communication skills.	UG	LE	Lecture
Spring 2008	AES221L	221L	Leadership Lab	AES	Aerospace Studies	0	Required laboratory for AES 221.	UG	LB	Lab
Spring 2008	AES222	222	The Air Force Way II	AES	Aerospace Studies	1	A survey course facilitating the transition from Air Force ROTC cadet to ROTC candidate. Featured topics include: Air Force heritage, leaders, Quality Air Force, ethics and values, leadership, group leadership problems, and application of communication skills.	UG	LE	Lecture
Spring 2008	AES222L	222L	Leadership Lab	AES	Aerospace Studies	0		UG	LB	Lab
Spring 2008	AES223	223	The Air Force Way III	AES	Aerospace Studies	1	A survey course facilitating the transition from the USAF ROTC cadet to ROTC candidate. Featured topics include: Air Force heritage, leaders, Quality Air Force, ethics and values, leadership, group leadership problems, and application of communication skills.	UG	LE	Lecture

Spring 2008	AES223L	223L	Leadership Lab	AES	Aerospac e Studies	0		UG	LB	Lab
Spring 2008	AES331	331	AF Leadership Mgmt I	AES	Aerospac e Studies	3	Study of leadership and quality management fundamentals, professional knowledge, the USAF doctrine, leadership ethics, and communication skills. Case studies are used to examine the USAF leadership and management situations.	UG	LE	Lecture
Spring 2008	AES331L	331L	Leadership Lab	AES	Aerospac e Studies	0	Required laboratory for AES 331.	UG	LB	Lab
Spring 2008	AES332	332	AF Leadership Mgmt II	AES	Aerospac e Studies	3	Study of leadership and quality management fundamentals, professional knowledge, the USAF doctrine, leadership ethics, and communication skills. Case studies are used to examine the USAF leadership and management situations.	UG	LE	Lecture
Spring 2008	AES332L	332L	Leadership Lab	AES	Aerospac e Studies	0		UG	LB	Lab
Spring 2008	AES333	333	AF Leadership Mgmt III	AES	Aerospac e Studies	3	Study of leadership and quality management fundamentals, professional knowledge, the USAF doctrine, leadership ethics, and communication skills. Case studies are used to examine the USAF leadership and management situations.	UG	LE	Lecture
Spring 2008	AES333L	333L	Leadership Lab	AES	Aerospac e Studies	0		UG	LB	Lab

Spring 2008	AES431	431	Prep for Active Duty I	AES	Aerospace Studies	3	Examines national security process, regional studies, advanced leadership ethics, and the USAF doctrine. Topics include the military as a profession, officership, military justice, civilian control of the military, current issues, and refining communication skills.	UG	LE	Lecture
Spring 2008	AES431L	431L	Leadership Lab	AES	Aerospace Studies	0	Required laboratory for AES 431.	UG	LB	Lab
Spring 2008	AES432	432	Prep for Active Duty II	AES	Aerospace Studies	3	Examines national security process, regional studies, advanced leadership ethics, and the USAF doctrine. Topics include the military as a profession, officership, military justice, civilian control of the military, current issues, and refining communication skills.	UG	LE	Lecture
Spring 2008	AES432L	432L	Leadership Lab	AES	Aerospace Studies	0		UG	LB	Lab
Spring 2008	AES433	433	Prep for Active Duty III	AES	Aerospace Studies	3	Examines national security process, regional studies, advanced leadership ethics, and the USAF doctrine. Topics include the military as a profession, officership, military justice, civilian control of the military, current issues, and refining communication skills.	UG	LE	Lecture
Spring 2008	AES433L	433L	Leadership Lab	AES	Aerospace Studies	0		UG	LB	Lab

Spring 2008	AFS200	200	AFR/AFR Amer Experience	AFS	Afr /Afr Amer Studies	4	A historical and methodological analysis of both African histories and cultures and the history of the diaspora struggles of persons of African descent to create a life and distinct culture among world civilizations.	UG	LE	Lecture
Spring 2008	AFS200W	200W	Writing in AFS 200	AFS	Afr /Afr Amer Studies	0	Required writing component for AFS 200.	UG	LB	Lab
Spring 2008	AFS300	300	AA Persp & Model of Succ	AFS	Afr /Afr Amer Studies	4	A critical study of real-life problems impacting African and African American life: economics, education, crime, gender issues, urban problems, globalism, etc. This course utilizes real-life models of succes as examples of how to effectively overcome these problems.	UG	LE	Lecture
Spring 2008	AFS400	400	Service Experience	AFS	Afr /Afr Amer Studies	4	Field placement of students in community organizations, social service agencies, and governmental entities where they will engage in work that relates to and enhances their understanding of the African American experience.	UG	IN	Internship
Spring 2008	AFS401	401	Senior Research Project	AFS	Afr /Afr Amer Studies	2	Divided over two quarters, this course allows students to bring their study in the major to completion through major research project that focuses on one specific aspect of African or African American life.	UG	IN	Internship

Spring 2008	AFS402	402	Ideas of Race, 1619-1865	AFS	Afr /Afr Amer Studies	4	This course studies the religious ideas that defined and sustained antiblack practices from 1619 to 1865.	UG	LE	Lecture
Spring 2008	AFS402W	402W	Writing in Ideas of Race	AFS	Afr /Afr Amer Studies	0		UG	LB	Lab
Spring 2008	AFS403	403	Ideas of Race 1950-Pres	AFS	Afr /Afr Amer Studies	4	This course studies the religious ideas that defined and sustained antiblack practices from 1950 to the present.	UG	LE	Lecture
Spring 2008	AFS403W	403W	Writing in AFS	AFS	Afr /Afr Amer Studies	0		UG	LB	Lab
Spring 2008	AFS499	499	Special Topics	AFS	Afr /Afr Amer Studies	1	Selected topics relevant to historical and current issues in African and African American studies. Course may be repeated for up to four credit hours.	UG	IS	Independent Study
Spring 2008	AFS602	602	Ideas of Race 1619-1865	AFS	Afr /Afr Amer Studies	4	This course studies the religious ideas that defined and sustained anti-Black practices from 1619-1865.	GR	LE	Lecture
Spring 2008	AFS603	603	Ideas of Race 1950-Present	AFS	Afr /Afr Amer Studies	4	This course studies the religious ideas that defined and sustained anti-Black practices from 1950 to the present.	GR	LE	Lecture
Spring 2008	ANT201	201	Basic Human Anatomy I	ANT	Anatomy	4	Osteology; histology of basic tissues; and topographical, histological, and developmental anatomy of nervous and endocrine systems. Laboratory exercises use human materials. 2.5 hours lecture, three hours lab.	UG	LE	Lecture

Spring 2008	ANT201L	201L	Basic Human Anat I Lab	ANT	Anatomy	0	Required Laboratory for ANT 201.	UG	LB	Lab
Spring 2008	ANT202	202	Basic Human Anatomy II	ANT	Anatomy	4	Basic topographical, histological, and develop-mental anatomy of the muscular, cardiovascular, digestive, respiratory, urinary, and reproductive systems. Laboratory exercises use human materials. 2.5 hours lecture, three hours lab.	UG	LE	Lecture
Spring 2008	ANT202L	202L	Basic Human Anat II Lab	ANT	Anatomy	0	Required Laboratory for ANT 202.	UG	LB	Lab
Spring 2008	ANT310	310	Human Anat and Physiol I	ANT	Anatomy	5	Study of the structure and function of the human body. Topics covered include anatomical terminology, biochemistry, cells, tissues, integumentary system, skeletal system, articulations, and endocrine system. Laboratory exercised use human material.	UG	LE	Lecture
Spring 2008	ANT311	311	Human Anat & Physiol II	ANT	Anatomy	5	Study of the structure and function of the human body. Topics covered include nervous system, special senses, muscular system, and lymphatic system. Laboratory exercises use human materials.	UG	LE	Lecture
Spring 2008	ANT311L	311L	Human Anat & Physiol II Lab	ANT	Anatomy	0		UG	LB	Lab

Spring 2008	ANT312	312	Human Anat & Physiol III	ANT	Anatomy	5	Study of the structure and function of the human body. Topics covered include cardiovascular system, digestive system, respiratory system, urinary system, acid-base balance, and reproductive system. Laboratory exercises as human materials.	UG	LE	Lecture
Spring 2008	ANT312L	312L	Human Anat & Physiol III Lab	ANT	Anatomy	0		UG	LB	Lab
Spring 2008	ANT434	434	Biological Safety	ANT	Anatomy	2	The basic principles and practices of biosafety are examined. This course teaches the identification, handling, and containment of potentially hazardous biological materials, including microorganisms and recombinant DNA.	UG	LE	Lecture
Spring 2008	ANT488	488	Independent Reading	ANT	Anatomy	1		UG	IS	Independent Study
Spring 2008	ANT499	499	Sel Topics in Anatomy	ANT	Anatomy	1	May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	ANT520	520	Anatomy of Human Motion	ANT	Anatomy	5	The skeletal, articular, nervous, cardiovascular, and respiratory systems are presented as they pertain to the muscular system. Basic muscle actions are described; sequential muscle actions and other concepts of kinesiology will not be discussed.	GR	LE	Lecture
Spring 2008	ANT520L	520L	Anatomy of Human Motion L	ANT	Anatomy	0	Required Laboratory for ANT 520.	GR	LB	Lab

Spring 2008	ANT634	634	BIological Safety	ANT	Anatomy	2	The basic principles and practices of biosafety are examined. This course teaches the identification, handling, and containment of potentially hazardous biological materials, including microorganisms and recombinant DNA.	GR	LE	Lecture
Spring 2008	ANT691	691	Human Neurobiology Fund	ANT	Anatomy	4	(Also listed as BMS 913.) Development, structure, and function of the human nervous system as it relates to neuropathology, clinical neurology, and behavioral science. Completion of general biology and/or general psychology courses and permission of instructor required.	GR	LE	Lecture
Spring 2008	ANT699	699	Spec Problems in Anatomy	ANT	Anatomy	1	Maximum of 4 credit hours applicable to degree requirements.	GR	IS	Independent Study
Spring 2008	ANT700	700	Human Anatomy Instruction	ANT	Anatomy	2	Overview of gross anatomy, histology, neuroanatomy, embryology, and educational theory that enables students to be more effective in the teaching of undergraduate courses in anatomy. For first-year graduate teaching assistants in the Department of Anatomy only.	GR	IS	Independent Study
Spring 2008	ANT700L	700L	Human Anatomy Instruct La	ANT	Anatomy	0	Required Laboratory for ANT 700.	GR	LB	Lab

Spring 2008	ANT701	701	Selected Anatomy Topics	ANT	Anatomy	1	Selected topics in anatomy. Topics vary.	GR	IS	Independent Study
Spring 2008	ANT702	702	Anatomical Techniques	ANT	Anatomy	3	Students will learn to prepare anatomical specimens for teaching and research. Techniques will include preparation of prosected materials, preparation of tissues for microscopy, processing of photographic materials, or other laboratory techniques. The course may be repeated once for credit.	GR	LB	Lab
Spring 2008	ANT711	711	Human Gross Anatomy	ANT	Anatomy	9	(Also listed as BMS 837.) Lectures and dissection of human cadaver; includes introductory embryology. 3.5 hours lecture, 9 hours lab.	GR	LE	Lecture
Spring 2008	ANT711L	711L	Human Gross Anatomy Lab	ANT	Anatomy	0	Required Laboratory for ANT 711.	GR	LB	Lab
Spring 2008	ANT715	715	Adv Human Embryology	ANT	Anatomy	4	Classical and contemporary issues in human developmental biology. Emphasis is on the clinical relevance of developmental processes, and on modern methods used to study the mechanisms of development.	GR	LE	Lecture
Spring 2008	ANT721	721	Human Microanatomy	ANT	Anatomy	8	Detailed microanatomy of human cells, tissues, and organ systems. 3 hours lecture, 6 hours lab.	GR	LE	Lecture
Spring 2008	ANT721L	721L	Human Microanatomy Lab	ANT	Anatomy	0	Required Laboratory for ANT 721.	GR	LB	Lab

Spring 2008	ANT731	731	Human Neurobiology	ANT	Anatomy	7	(Also listed as BMS 903.) Detailed survey of the anatomy and physiology of the major fiber tracts and cell groups of the human central nervous system. 3 hours lecture, 4 hours lab.	GR	LE	Lecture
Spring 2008	ANT731L	731L	Human Neurobiology Lab	ANT	Anatomy	0	Required laboratory for ANT 731.	GR	LB	Lab
Spring 2008	ANT732	732	Cellular Neurobiology	ANT	Anatomy	3	Correlated ultrastructure, chemistry, and physiology of vertebrate neurons, neuroglia, and synapses under normal conditions and during development, degeneration, and regeneration.	GR	LE	Lecture
Spring 2008	ANT732L	732L	Cellular Neurobiology Lab	ANT	Anatomy	0	Required laboratory for ANT 732.	GR	LB	Lab
Spring 2008	ANT777	777	Medical Neuroscience	ANT	Anatomy	7	(Also listed as P&B 777 and BMS 854.) Interdisciplinary/interdepartmental course for graduate and medical students that integrates basic and clinical neurosciences. Structural and functional topics are combined with clinical information to address major neurological and psychiatric disorders.	GR	LE	Lecture
Spring 2008	ANT789	789	Continuing Registration	ANT	Anatomy	1		GR	IS	Independent Study
Spring 2008	ANT800	800	Anatomy Seminar	ANT	Anatomy	1	Topics vary. Graded pass/unsatisfactory.	GR	SE	Seminar

Spring 2008	ANT811	811	Comprehensive Anatomy	ANT	Anatomy	5	Integrates general principles and concepts of the following systems: cardiovascular, gastrointestinal, lymphatic, nervous, respiratory, endocrine, integumentary, muscular, reproductive, and urinary. Knowledge is assessed by an oral examination before a faculty review committee. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	ANT850	850	Scholarly Project I	ANT	Anatomy	3	Intensive analysis of scientific literature with emphasis on content and organization of anatomical journal articles. Course concludes with oral presentations of student projects involving contemporary anatomical issues based on selected journal articles.	GR	IS	Independent Study
Spring 2008	ANT851	851	Scholarly Project	ANT	Anatomy	4	Project culminates in a paper on a contemporary anatomical issue in which students integrate the primary objectives, results, and significance of selected journal articles and identify areas for potential research.	GR	IS	Independent Study
Spring 2008	ANT860	860	Prin Biomedical Research	ANT	Anatomy	1	Principles of Biomedical Research is appropriate for students that will be involved in biomedical research. PBR provides a lecture and student interactive series designed to introduce students to the basics of biomedical research.	GR	LE	Lecture

Spring 2008	ANT899	899	Anatomy Research	ANT	Anatomy	1	Supervised thesis research.	GR	IS	Independent Study
Spring 2008	ANT900	900	Grad Seminar-Anatomy	ANT	Anatomy	1	Topics vary.	GR	SE	Seminar
Spring 2008	ARA111	111	Essentials of Arabic	ARA	Arabic	4	Introduction to Arabic with an emphasis on speaking the language.	UG	LE	Lecture
Spring 2008	ARA112	112	Essentials of Arabic	ARA	Arabic	4	Introduction to Arabic with an emphasis on speaking the language.	UG	LE	Lecture
Spring 2008	ART200	200	Sophomore Workshop	ART	Art	1	Introduction to slide taking, matting and framing and professional opportunities for art majors. This course is a prerequisite for all upper level studio art courses. Graded pass/unsatisfactory.	UG	LL	Lecture/Lab Combination
Spring 2008	ART206	206	Drawing I	ART	Art	4	Introduction to materials, techniques, and concepts of drawing.	UG	LB	Lab
Spring 2008	ART207	207	Photography I	ART	Art	4	Exploration of basic processes and concepts in still photography. Work involves learning basic skills and techniques. Assignments designed to develop an understanding of light as an expressive element.	UG	LB	Lab
Spring 2008	ART208	208	Sculpture I	ART	Art	4	Introduction to basic processes, materials, and concepts of sculpture.	UG	LB	Lab
Spring 2008	ART209	209	Introduction to Color	ART	Art	4	Introduction to the study of the elements and interaction of color.	UG	LB	Lab

Spring 2008	ART211	211	Art History I: Before 1150 AD	ART	Art	4	Painting and sculpture before A.D. 1150. Introduces the basic concepts of visual and stylistic analysis and a historical survey of painting and sculpture in the Western world from prehistoric to medieval times.	UG	LE	Lecture
Spring 2008	ART212	212	Art History II: 1150 to 1850	ART	Art	4	Painting and sculpture from 1150 to 1850. Historical survey of painting and sculpture in the Western world from late medieval times to the dawn of the modern era.	UG	LE	Lecture
Spring 2008	ART213	213	Art History III: 1850-Present	ART	Art	4	Painting and sculpture since 1850. Historical survey of modern painting and sculpture in the Western world.	UG	LE	Lecture
Spring 2008	ART213W	213W	Writing in ART 213	ART	Art	0		UG	LB	Lab
Spring 2008	ART214	214	Visual Art West Culture	ART	Art	4	Introduction to the visual arts focusing on selected major works of art throughout history. Discusses comparisons across time, basic art media, and the formal characteristics of art.	UG	LE	Lecture
Spring 2008	ART215	215	Foundations of AED	ART	Art	4	Introductory course in art education involving approaches for aesthetic awareness, inquiries into theories of art, art appreciation and criticism, current issues, as well as child development through art, and art education methodologies. (Previously listed as AED 214.)	UG	LE	Lecture

Spring 2008	ART228	228	Drawing II	ART	Art	4	Introduces concepts and techniques of drawing. May include studies from the human figure and other natural forms. Topics vary.	UG	LB	Lab
Spring 2008	ART258	258	Photography II	ART	Art	4	Development of personal concepts and aesthetic expression in photography. Emphasis on individualized approach to photographic problems that arise from students' work.	UG	LB	Lab
Spring 2008	ART300	300	Studio Workshop	ART	Art	1	Studio experience directly involving students with a professional artist executing a special project. Covers a range of information from preliminary planning to final discussion on the project. Topics vary.	UG	LB	Lab
Spring 2008	ART301	301	Independent Study in Art	ART	Art	1	Special studies and intensive individual work with faculty supervision in art.	UG	IS	Independent Study
Spring 2008	ART303	303	Independent Study in Art	ART	Art	1	Special studies and intensive individual work with faculty supervision in art.	UG	IS	Independent Study
Spring 2008	ART309	309	Art Theory and Philosophy	ART	Art	4	Courses offered under this number provide both historical surveys and intensive studies in art theory and philosophy.	UG	LE	Lecture
Spring 2008	ART328	328	Intermediate Drawing	ART	Art	4	Development of personal concepts and aesthetic expression in drawing. Emphasis on individualized approach to drawing problems that arise from the work of students. Topics vary	UG	LB	Lab

Spring 2008	ART337	337	Beginning Expanded Media	ART	Art	4	Study of visual and aesthetic techniques and concepts emphasizing the development of individual artistic expression in various media.	UG	LB	Lab
Spring 2008	ART347	347	Beginning Painting	ART	Art	4	Working from still, figure, and landscape emphasizing the use of color and drawing in visual organization.	UG	LB	Lab
Spring 2008	ART348	348	Intermediate Painting	ART	Art	4	Emphasis on principles of pictorial organization. Attention to the relationship of subject matter and abstraction as related to contemporary and traditional approaches.	UG	LB	Lab
Spring 2008	ART349	349	Intermediate Painting	ART	Art	4	Emphasis on principles of pictorial organization. Attention to the relationship of subject matter and abstraction as related to contemporary and traditional approaches.	UG	LB	Lab
Spring 2008	ART358	358	Intrmed Blk & White Photo	ART	Art	4	Development of personal concepts and aesthetic expression in photography, Emphasis on individualized approach to photographic problems that arise from the work of students. Topics vary.	UG	LB	Lab
Spring 2008	ART359	359	Color Photography	ART	Art	4	Development of personal concepts and aesthetic expression in photography. Emphasis on individualized approach to photographic problems that arise from the work of students. Topics vary.	UG	LB	Lab

Spring 2008	ART366	366	Beg Printmkg: Relief	ART	Art	4	Exploration of printmaking, stressing relief methods using wood and linoleum. Exploration of aesthetic possibilities of the media. Topics vary.	UG	LB	Lab
Spring 2008	ART367	367	Beg Printmkg: Intaglio	ART	Art	4	Exploration of printmaking stressing intaglio methods: etching, engraving, drypoint, aquatint, and liftgrounds. Use of black-and-white techniques and introduction to color printing. Topics vary.	UG	LB	Lab
Spring 2008	ART368	368	Beg Printmkg: Lithography	ART	Art	4	Introduction to basic lithographic techniques using stone and/or metal plate. Emphasis on black-and-white printing and aesthetic possibilities of the media. Topics vary.	UG	LB	Lab
Spring 2008	ART369	369	Beg Printmkg: Screenprinting	ART	Art	4	Introduction to silkscreening techniques such as stencil cut, photo stencil, and crayon and touche resists. Exploration of aesthetic possibilities of the media. Topics vary.	UG	LB	Lab
Spring 2008	ART375	375	Armatures/Moulds/Casting	ART	Art	4	Development of personal concepts and aesthetic expression in sculpture. Emphasis on individualized approach to sculptural problems using armature structure, mould making, and casting. May be taken for letter grade or pass/unsatisfactory.	UG	LB	Lab

Spring 2008	ART376	376	Clay Forming and Firing	ART	Art	4	Development of personal concepts and aesthetic expression in sculpture. Emphasis on individualized approach to sculptural problems using clay forming and firing. May be taken for letter grade or pass/unsatisfactory.	UG	LB	Lab
Spring 2008	ART377	377	Metal Fab / Stone Carving	ART	Art	4	Development of personal concepts and aesthetic expression in sculpture. Emphasis on individualized approach to sculptural problems using metal fabricating and stone carving. May be taken for letter grade or pass/unsatisfactory.	UG	LB	Lab
Spring 2008	ART378	378	Wood Carve and Fabricate	ART	Art	4	Development of personal concepts and aesthetic expression in sculpture. Emphasis on individualized approach to sculptural problems using wood carving and wood fabricating. May be taken for letter grade or pass/unsatisfactory.	UG	LB	Lab
Spring 2008	ART379	379	Sculpt-Figure Modeling	ART	Art	4	Introduction to techniques and concepts involved in sculpting from life. Concentration on the development of greater understanding of the human figure and an increased sensitivity to three-dimensional form. Course may be repeated for credit. May be taken for letter grade or pass/unsatisfactory.	UG	LB	Lab

Spring 2008	ART397	397	Intro to Museum Studies	ART	Art	4	Examination of the history, purposes, and literature of museums and galleries. Various aspects of gallery management such as planning, organizing, and installing exhibitions.	UG	LE	Lecture
Spring 2008	ART397W	397W	Writing in ART 397	ART	Art	0		UG	LB	Lab
Spring 2008	ART400	400	Senior Seminar	ART	Art	2	Group discussions of contemporary writings in art and critiques of student work in a peer setting with faculty and visiting artists participating on an informal basis.	UG	SE	Seminar
Spring 2008	ART401	401	Ind Study in Art History	ART	Art	1	Intensive individual work with faculty supervision in art history.	UG	IS	Independent Study
Spring 2008	ART402	402	Museum/Gallery Internship	ART	Art	1	Supervised individual projects in museum or gallery setting. Department permission required.	UG	IS	Independent Study
Spring 2008	ART404	404	Studies in Art History	ART	Art	1	Provides opportunities to explore problems and approaches to art and art history and includes cross-period and interdisciplinary studies.	UG	LE	Lecture
Spring 2008	ART404W	404W	Writing in Art 404	ART	Art	0		UG	LB	Lab
Spring 2008	ART405	405	Studies in Art	ART	Art	1	Provides opportunities to explore problems and approaches to art and includes cross-media and interdisciplinary studies.	UG	LL	Lecture/Lab Combination

Spring 2008	ART409	409	Art Theory & Criticism	ART	Art	4	Historical surveys and intensive studies of art theory and criticism.	UG	LE	Lecture
Spring 2008	ART409W	409W	Writing in ART 409	ART	Art	0		UG	LB	Lab
Spring 2008	ART410	410	Studies in American Art	ART	Art	4	General surveys and intensive studies of periods, major movements, and artists of the time.	UG	LE	Lecture
Spring 2008	ART410W	410W	Writing in ART 410	ART	Art	0		UG	LB	Lab
Spring 2008	ART411	411	Studies Ancient/Classical	ART	Art	4	(Also listed as CLS 340.) General surveys and intensive studies of the period, major movements, and artists of the time.	UG	LE	Lecture
Spring 2008	ART411W	411W	Writing in ART 411	ART	Art	0		UG	LB	Lab
Spring 2008	ART412	412	Studies in Medieval Art	ART	Art	4	General surveys and intensive studies of the period, major movements, and artists of the time.	UG	LE	Lecture
Spring 2008	ART413	413	Studies Renaissance Art	ART	Art	4	General surveys and intensive studies of the period, major movements, and artists of the time.	UG	LE	Lecture
Spring 2008	ART413W	413W	Writing in ART 413	ART	Art	0		UG	LB	Lab
Spring 2008	ART414	414	Studies in Baroque Art	ART	Art	4	General surveys and intensive studies of the period, major movements, and artists of the time.	UG	LE	Lecture
Spring 2008	ART414W	414W	Writing in ART 414	ART	Art	0	Required writing component for ART 414.	UG	LB	Lab
Spring 2008	ART415	415	Studies in 19th Cent Art	ART	Art	4	General surveys and intensive studies of the period, major movements, and artists of the time.	UG	LE	Lecture

Spring 2008	ART415W	415W	Writing in ART 415	ART	Art	0		UG	LB	Lab
Spring 2008	ART416	416	Studies 20th Century Art	ART	Art	4	General surveys and intensive studies of the period, major movements, and artists of the time.	UG	LE	Lecture
Spring 2008	ART416W	416W	Writing in ART 416	ART	Art	0	Required writing component for ART 416.	UG	LB	Lab
Spring 2008	ART417	417	Studies in Non Western Art	ART	Art	4	General surveys and intensive studies of periods, major movements, and artists in non-Western art.	UG	LE	Lecture
Spring 2008	ART417W	417W	Writing in ART 417	ART	Art	0	Required writing component for ART 417.	UG	LB	Lab
Spring 2008	ART428	428	Advanced Drawing	ART	Art	4	Exploration of the structure and interrelationships of visual form in drawing, painting, and sculpture. Principal historical modes of drawing examined. Topics vary.	UG	LB	Lab
Spring 2008	ART437	437	Advanced Expanded Media	ART	Art	4	Development of personal concepts and aesthetic expression in media. Emphasis on individualized approach to media problems.	UG	LB	Lab
Spring 2008	ART448	448	Advanced Painting	ART	Art	4	Continued emphasis on pictorial organization with increased attention to the personal imagery of students.	UG	LB	Lab
Spring 2008	ART458	458	Adv Blk & White Photo	ART	Art	4	Development of personal concepts and aesthetic expression in photography. Emphasis on individualized approach to problems that arise from the work of students. Topics vary.	UG	LB	Lab

Spring 2008	ART466	466	Adv Printmkg: Relief	ART	Art	4	Development of personalized concepts and individual aesthetic expression in printmaking. Topics vary.	UG	LB	Lab
Spring 2008	ART467	467	Adv Printmkg: Intaglio	ART	Art	4	Development of personalized concepts and individual aesthetic expression in printmaking. Topics vary.	UG	LB	Lab
Spring 2008	ART468	468	Adv Printmkg: Lithography	ART	Art	4	Development of personalized concepts and individual aesthetic expression in printmaking. Topics vary.	UG	LB	Lab
Spring 2008	ART469	469	Adv Printmkg: Scrnprntng	ART	Art	4	Development of personalized concepts and individual aesthetic expression in printmaking. Topics vary.	UG	LB	Lab
Spring 2008	ART478	478	Advanced Sculpture	ART	Art	4	Further development of personal concepts and aesthetic expression in sculpture. Emphasis on individualized approach to sculptural problems using media selected by the students. Titles vary.	UG	LB	Lab
Spring 2008	ART497	497	Advanced Museum Studies	ART	Art	4	Classroom and supervised practical work in art gallery and museum management.	UG	LB	Lab
Spring 2008	ART528	528	Drawing	ART	Art	4	Exploration of the structure and interrelationships of visual form in drawing, painting, and sculpture. Principal historical modes of drawing are examined.	GR	LB	Lab
Spring 2008	ART548	548	Painting	ART	Art	4	Emphasis on pictorial organization with increased attention to the individual student's personal imagery.	GR	LB	Lab

Spring 2008	ART558	558	Photography	ART	Art	4	Exploration of personal concepts and aesthetic expression in photography. Intensive individual work with faculty supervision.	GR	LB	Lab
Spring 2008	ART566	566	Printmaking: Relief	ART	Art	4	Development of personalized concepts and individual aesthetic expression in printmaking with an emphasis in the area of relief. Titles vary.	GR	LB	Lab
Spring 2008	ART567	567	Printmaking: Intaglio	ART	Art	4	Development of personalized concepts and individual aesthetic expression in printmaking with an emphasis in the area of intaglio.	GR	LB	Lab
Spring 2008	ART568	568	Printmaking: Lithography	ART	Art	4	Development of personalized concepts and individual aesthetic expression in printmaking with an emphasis in the area of lithography.	GR	LB	Lab
Spring 2008	ART569	569	Printmaking: Scrnprnting	ART	Art	4	Development of personalized concepts and individual aesthetic expression in printmaking with an emphasis in the area of screenprinting.	GR	LB	Lab
Spring 2008	ART578	578	Sculpture	ART	Art	4	Development of personal concepts and aesthetic expression in sculpture. Emphasis on individualized approach to sculptural problems using media selected by the students.	GR	LB	Lab

Spring 2008	ART600	600	Studio Workshop	ART	Art	1	Studio experience directly involving students with professional artists executing special projects. Covers a range of information from preliminary planning to final discussion on the projects.	GR	LB	Lab
Spring 2008	ART601	601	Independent Study in Art	ART	Art	1	Special studies for qualified students. Intensive individually directed work in art with faculty consultation and supervision.	GR	IS	Independent Study
Spring 2008	ART604	604	Studies in Art History	ART	Art	1	Titles vary.	GR	LE	Lecture
Spring 2008	ART605	605	Studies in Art	ART	Art	1	Provides opportunities to explore special problems and approaches to art and includes cross-media and interdisciplinary studies. Titles vary.	GR	LB	Lab
Spring 2008	ART609	609	Art Theory and Criticism	ART	Art	4	Historical surveys and intensive studies in art theory and criticism.	GR	LE	Lecture
Spring 2008	ART610	610	Studies in American Art	ART	Art	4	General surveys and intensive studies of periods, major movements, and artists in American art. Titles vary.	GR	LE	Lecture
Spring 2008	ART611	611	Studies Ancient/Classical	ART	Art	4	(Also listed as CLS 540.) General surveys and intensive studies of the period, major movements, and artists of the time. Titles vary.	GR	LE	Lecture
Spring 2008	ART612	612	Studies in Medieval Art	ART	Art	4	General surveys and intensive studies of the period, major movements, and artists of the time. Titles vary.	GR	LE	Lecture

Spring 2008	ART613	613	Studies in Renaissance Ar	ART	Art	4	General surveys and intensive studies of the period, major movements, and artists of the time. Titles vary.	GR	LE	Lecture
Spring 2008	ART614	614	Studies in Baroque Art	ART	Art	4	General surveys and intensive studies of the period, major movements, and artists of the time. Titles vary.	GR	LE	Lecture
Spring 2008	ART615	615	Nineteenth Century Art	ART	Art	4	General surveys and intensive studies of the period, major movements, and artists of the time. Titles vary.	GR	LE	Lecture
Spring 2008	ART616	616	Studies 20th Century Art	ART	Art	4	Development of personalized concepts and individual aesthetic expression in printmaking.	GR	LE	Lecture
Spring 2008	ART697	697	Museology & Gallery Mgt	ART	Art	4	Supervised independent field experience and practical work in all areas of Art Museum management in the university and greater Dayton area communities. Each student to be handled as a tutorial intern. Graduate standing required with twelve hours of 400 level Museology and Gallery Management or permission of instructor.	GR	IS	Independent Study
Spring 2008	ART701	701	Ind Study in Art History	ART	Art	1	Intensive individually directed work in art history with faculty consultation and supervision.	GR	IS	Independent Study
Spring 2008	ASL101	101	American Sign Lang I	ASL	American Sign Languag e	4	An introduction to basic conversational skills in American Sign Language, including explosure to Deaf culture. Outside activity required.	UG	LE	Lecture

Spring 2008	ASL102	102	American Sign Lang II	ASL	American Sign Language	4	Continuation of the introduction to basic conversational skills in American Sign Language, including exposure to Deaf Culture. Outside activity required.	UG	LE	Lecture
Spring 2008	ASL103	103	American Sign Lang III	ASL	American Sign Language	4	A continued expansion of the conversational ranges and knowledge of American Sign Language from ASL 101 and 102. Outside activitiy required.	UG	LE	Lecture
Spring 2008	ASL201	201	American Sign Lang IV	ASL	American Sign Language	4	An intermediate course in American Sign Language that continues to develop grammatical and vocabulary competency in conversational ranges. Outside activitiy required.	UG	LE	Lecture
Spring 2008	ASL202	202	American Sign Lang V	ASL	American Sign Language	4	An expansion of the conversational skills and knowledge of American Sign Language from ASL 201. Outside activity required.	UG	LE	Lecture
Spring 2008	ASL203	203	American Sign Lang VI	ASL	American Sign Language	4	A continuing development of intermediate conversational skills in American Sign Language building on competencies from ASL 202. Outside activity required.	UG	LE	Lecture
Spring 2008	ATH241	241	Intro to Bio Anth	ATH	Anthropology	4	An overview of human biology and behavior, including human evolution, primate behavior, and human physical variation.	UG	LE	Lecture
Spring 2008	ATH241W	241W	Writing in ATH 241	ATH	Anthropology	0	Required writing component for ATH 241.	UG	LB	Lab

Spring 2008	ATH242	242	Intro to Archaeology	ATH	Anthropology	4	Introduction to the nature of archaeological data, techniques of archaeological dating, and methods of data collection, analysis, and interpretation.	UG	LE	Lecture
Spring 2008	ATH242W	242W	Writing in ATH 242	ATH	Anthropology	0	Required writing component for ATH 242.	UG	LB	Lab
Spring 2008	ATH300	300	Lab in Technology	ATH	Anthropology	4	Emphasizes recognition and analysis of archaeological remains from prehistoric and historic sites. Students develop an original analysis of some body of archaeological material.	UG	LB	Lab
Spring 2008	ATH340	340	Applied ATH: An Introduction	ATH	Anthropology	4	Introduces various aspects of applied anthropology as currently used in a variety of behavioral activity fields locally, nationally, and internationally.	UG	LE	Lecture
Spring 2008	ATH341	341	Indians of North America	ATH	Anthropology	4	Survey of selected North American Indian societies, contrasting their modern and aboriginal cultures.	UG	LE	Lecture
Spring 2008	ATH342	342	Anthro of Sex & Gender	ATH	Anthropology	4	Studies similarities and differences between males and females, their status, roles in selected societies, stereotypes, physical and behavioral aspects of sex and gender, and cross-cultural variations in gender roles.	UG	LE	Lecture

Spring 2008	ATH346	346	Anthropology of Religion	ATH	Anthropology	4	(Also listed as REL 362.) Anthropological approach to meaning and function of religion in social life, and nature of thought or belief systems that give rise to different forms of religious life. Emphasis on primitive and peasant societies.	UG	LE	Lecture
Spring 2008	ATH349	349	Anthropological Linguistics	ATH	Anthropology	4	The science of language as an anthropologist's tool for field research. How to describe language as sound, and write an unwritten language; how the anthropologist can make use of linguistic training for acquiring cultural data.	UG	LE	Lecture
Spring 2008	ATH351	351	Human Evolution	ATH	Anthropology	4	History, description, and interpretation of the fossil record for primate evolution with emphasis on human evolution.	UG	LE	Lecture
Spring 2008	ATH351W	351W	Writing in ATH 351	ATH	Anthropology	0		UG	LB	Lab
Spring 2008	ATH352	352	Primate Behavior	ATH	Anthropology	4	Detailed examination of the behavior of nonhuman primates, including monkeys and apes, as it relates to human evolution and behavior.	UG	LE	Lecture
Spring 2008	ATH352W	352W	Writing in Primate Behavior	ATH	Anthropology	0		UG	LB	Lab
Spring 2008	ATH358	358	Human Variation&Adpt	ATH	Anthropology	4	Examination of human biological variation focusing on interpopulation variation, environmental adaptation, and the concept of race.	UG	LE	Lecture

Spring 2008	ATH358W	358W	Writing in ATH 358	ATH	Anthropology	0	Required writing component for ATH 358.	UG	LB	Lab
Spring 2008	ATH365	365	Archaeology of N America	ATH	Anthropology	4	Detailed examination of the major prehistoric cultures of North America. Emphasis on eastern North American prehistory.	UG	LE	Lecture
Spring 2008	ATH368	368	Arch Field Techniques	ATH	Anthropology	4	Classroom and field preparation for archaeological survey and excavations.	UG	LE	Lecture
Spring 2008	ATH369	369	Archaeology Field School	ATH	Anthropology	6	Excavation training on prehistoric sites.	UG	LB	Lab
Spring 2008	ATH392	392	Readings in Anthropology	ATH	Anthropology	2	May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	ATH399	399	Studies-Selected Subjects	ATH	Anthropology	1	Problems, approaches, and topics in the field of anthropology. Topics vary.	UG	LE	Lecture
Spring 2008	ATH400	400	Topics in Archaeology	ATH	Anthropology	4	Advanced study of various specialized aspects of archaeology. Classes may be lecture or seminar.	UG	LE	Lecture
Spring 2008	ATH405	405	Ethnographic Film	ATH	Anthropology	4	Students will explore the use of film as an ethnograhic tool. These films will be used to convey ethnographic or anthropological depth and understanding. Behavior and customs will be analyzed.	UG	LE	Lecture
Spring 2008	ATH410	410	Spec Topics-Cultural ATH	ATH	Anthropology	4	Selected topics concerning the method and theory of anthropological thought and their relationship to the allied disciplines of economics, linguistics, art, politics, and history. Emphasis on current trends influencing research in cultural anthropology. Topics vary.	UG	LE	Lecture

Spring 2008	ATH410W	410W	Writing in ATH 410	ATH	Anthropology	0		UG	LB	Lab
Spring 2008	ATH415	415	Anthro of Latin America	ATH	Anthropology	4	This course will provide a survey of Latin America - students will examine its history,as well as become acquainted with cultural pluralism, social organizations, economic conditions, and current issues.	UG	LE	Lecture
Spring 2008	ATH446	446	Peoples/Cultures So Asia	ATH	Anthropology	4	Survey and analysis of cultural diversity and unity in southern Asia, particularly India, Pakistan, Bangladesh, and Sri Lanka.	UG	LE	Lecture
Spring 2008	ATH447	447	Peoples/Cultures Africa	ATH	Anthropology	4	Survey of the peoples and sociocultural systems of Africa with emphasis on sub-Saharan ecological and biocultural relationships.	UG	LE	Lecture
Spring 2008	ATH447W	447W	Writing in ATH 447	ATH	Anthropology	0		UG	LB	Lab
Spring 2008	ATH448	448	Develop Ethnolog Thought	ATH	Anthropology	4	Surveys historical development of ethnological thought and emphasizes theories of social and cultural change.	UG	LE	Lecture
Spring 2008	ATH448W	448W	Writing in ATH 448	ATH	Anthropology	0		UG	LB	Lab
Spring 2008	ATH450	450	Political Anthropology	ATH	Anthropology	4	(Also listed as PLS 450.) Study of the cultural part of primitive societies that we recognize as political organization. An attempt is made to show how in less complex (primitive) societies new local communities come into being through fission.	UG	LE	Lecture

Spring 2008	ATH450W	450W	Writing in Poli Anthropology	ATH	Anthropology	0		UG	LB	Lab
Spring 2008	ATH455	455	Biomedical Anthropology	ATH	Anthropology	4	An anthropological perspective of health and illness in selected societies of the world. Integrates physical, social, and cultural dimensions of disease, nutrition, fertility and population growth, health beliefs and practices, and the consequences of culture change and modernization.	UG	LE	Lecture
Spring 2008	ATH455W	455W	Writing in ATH 455	ATH	Anthropology	0		UG	LB	Lab
Spring 2008	ATH458	458	Anth of Women's Health	ATH	Anthropology	4	Integrates biological and sociological dimensions of women's health throughout the world. It examines cross-cultural variation in disease and illness and the sociocultural contexts that define models of women's health.	UG	LE	Lecture
Spring 2008	ATH458W	458W	Writing in ATH 458	ATH	Anthropology	0		UG	LB	Lab
Spring 2008	ATH465	465	Sem Woodland Archaeology	ATH	Anthropology	4	Intensive review of the prehistoric Woodland period (600 B.C.-A.D. 900) of eastern North America. Regional cultures such as Adena and Ohio Hopewell and topics including trade, the economy, political organization, and mortuary customs are considered.	UG	SE	Seminar

Spring 2008	ATH468	468	Sem Archaeological Theory	ATH	Anthropology	4	Wide-ranging survey of traditional and contemporary archaeological theory, with study of its applications in various parts of the world.	UG	SE	Seminar
Spring 2008	ATH468W	468W	Writing in ATH 468	ATH	Anthropology	0		UG	LB	Lab
Spring 2008	ATH475	475	Historical Archaeology	ATH	Anthropology	4	Focuses on the post-European discovery period of America. Archaeological interpretations of colonial, plantation, industrial, frontier, and urban sites and materials are explored in seminar discussions and through laboratory analyses of southwest Ohio site collections.	UG	LE	Lecture
Spring 2008	ATH492	492	Ind Research in Anthro	ATH	Anthropology	2	May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	ATH542	542	Sex and Gender	ATH	Anthropology	4	Study of male and female roles and how they vary from one society to the next. Topics include sex and gender stereotypes, physical and behavioral differences, and cross-cultural differences in roles and status.	GR	LE	Lecture
Spring 2008	ATH546	546	Anthropology of Religion	ATH	Anthropology	4	(Also listed as REL 562.) Anthropological approach to the meaning and function of religion in social life, and the nature of the thought or belief systems that gave rise to different forms of religious life. Emphasis on primitive and peasant societies.	GR	LE	Lecture

Spring 2008	ATH569	569	Field School Archaeology	ATH	Anthropology	6	Excavation training on prehistoric sites.	GR	LB	Lab
Spring 2008	ATH599	599	Studies in Selected Subj	ATH	Anthropology	1	Problems, approaches, and topics in the field of anthropology. Topics vary.	GR	IS	Independent Study
Spring 2008	ATH600	600	Spec Topics Archaeology	ATH	Anthropology	4	Advanced study of various specialized aspects of archaeology.	GR	LE	Lecture
Spring 2008	ATH610	610	Spec Topics-Cultural ATH	ATH	Anthropology	4	Examines selected topics concerning the method and theory of anthropological thought and their relationship to the allied disciplines of economics, linguistics, art, politics, and history. Emphasis on current trends influencing research in cultural anthropology. Topics vary.	GR	LE	Lecture
Spring 2008	ATH646	646	Peoples/Cultures So Asia	ATH	Anthropology	4	Survey and analysis of cultural diversity and unity in Southern Asia, particularly India, Pakistan, Bangladesh, and Sri Lanka.	GR	LE	Lecture
Spring 2008	ATH648	648	Dev Ethnological Thought	ATH	Anthropology	4	Surveys historical development of ethnological thought; emphasizes theories of social and cultural change.	GR	LE	Lecture
Spring 2008	ATH650	650	Political Anthropology	ATH	Anthropology	4	(Also listed as PLS 650.) Study of that part of the culture of primitive societies that is recognized as political organization. An attempt is made to show how in less complex, primitive societies, new local communities come into being through fission.	GR	LE	Lecture

Spring 2008	ATH655	655	Biomedical Anthropology	ATH	Anthropology	4	An anthropological perspective of health and illness in selected societies of the world that integrates physical, social, and cultural dimensions of disease, nutrition, fertility and population growth, health beliefs and practices, and the consequences of culture change and modernization.	GR	LE	Lecture
Spring 2008	ATH655W	655W	Writing in Biomed Anthropology	ATH	Anthropology	0	Writing in Biomedical Anthropology	GR	LB	Lab
Spring 2008	ATH658	658	Anth of Women's Health	ATH	Anthropology	4	Integrates biological and sociocultural dimensions of women's health throughout the world. Examines cross-cultural variation in disease and illness and the sociocultural contexts that define models of women's health.	GR	LE	Lecture
Spring 2008	ATH665	665	Sem Woodland Archaeology	ATH	Anthropology	4	Intensive review of the prehistoric Woodland period (600 BC-AD 900) of eastern North America. Regional cultures such as Adena and Ohio Hopewell. Trade, economy, political organization, and mortuary customs are considered.	GR	SE	Seminar

Spring 2008	ATH675	675	Historical Archaeology	ATH	Anthropology	4	Focuses on the post-European discovery period of America; archaeological interpretations of colonial, plantation, industrial, frontier, and urban sites and materials are explored in seminar discussions, and through lab analysis of southwest Ohio site collections.	GR	LE	Lecture
Spring 2008	ATH692	692	Dir Studies Anthropology	ATH	Anthropology	2	May be taken for letter grade or pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	ATR261	261	Basic Principles of ATR	ATR	Athletic Training	4	Introductory course to the field of athletic training.	UG	LL	Lecture/Lab Combination
Spring 2008	ATR262	262	Athletic Emergency Care	ATR	Athletic Training	3	The recognition and management of athletic emergencies will be emphasized. The relationships of other allied health care providers in similar situations will also be discussed and studied.	UG	LE	Lecture
Spring 2008	ATR284	284	Basic Skills in ATR	ATR	Athletic Training	3	Supervised field work for sophomore students who are seeking certification or a concentration in a specific area. Titles vary. Contact hours vary according to subject. May be taken for letter grade or pass/unsatisfactory.	UG	IN	Internship

Spring 2008	ATR285	285	Rehabilitation Skills	ATR	Athletic Training	3	This is the second practicum in a series of nine to meet the competencies of athletic training. The emphasis will be in the development of injury/illness rehabilitation protocols for the physically active.	UG	IN	Internship
Spring 2008	ATR286	286	Emergency Mgmt Skills	ATR	Athletic Training	3	This is the third practicum in a series of nine to meet the competencies of athletic training. The emphasis will be on emergency situations and appropriate protocols of care.	UG	IN	Internship
Spring 2008	ATR302	302	Strength & Cond Ath Trng	ATR	Athletic Training	3	To provide the opportunity to learn and practice various testing and techniques to improve strength, flexibility, power, agility, speed, endurance, body composition and cardiovascular fitness levels.	UG	LL	Lecture/Lab Combination
Spring 2008	ATR303	303	Therapeutic Exercise/ATR	ATR	Athletic Training	3	This course will provide the student with the basic skills necessary to develop a therapeutic exercise program for injuries conditions of the physically active.	UG	LE	Lecture

Spring 2008	ATR360	360	Ther Modalities in Ath Tr	ATR	Athletic Training	3	The study and practical application of therapeutic modalities for the treatment of athletic injuries. Modalities may include superficial heat and cold, hydrotherapy, massage, traction, intermittent compression units, ultrasound, electrostimulation, and microwave and shortwave diathermy.	UG	LL	Lecture/Lab Combination
Spring 2008	ATR361	361	Assmnt of Athletic Injury	ATR	Athletic Training	4	This is the second course in a series of three. This course will emphasize assessment skills for athletic injuries/conditons of the physically active.	UG	LL	Lecture/Lab Combination
Spring 2008	ATR384	384	Lower Body Assesmnt Skill	ATR	Athletic Training	1	Lower Body Assessment Skills: This is the fourth clinical/practicum course in a series of nine to meet the competencies of athletic training. The emphasis will be on lower body injury assessment skills. Concurrent enrollment in ATR 360.	UG	IN	Internship
Spring 2008	ATR385	385	Upperbody Assessmnt Skill	ATR	Athletic Training	3	This is the fifth practicum in a series of nine to meet the competencies of athletic training. The emphasis will be on evaluation of injuries/conditions of the upper body.	UG	IN	Internship

Spring 2008	ATR386	386	Thera Modalities Skills	ATR	Athletic Training	3	This is the sixth practicum in a series of nine to meet the competencies of athletic training. The emphasis will be on treatment protocols for injuries/conditions to the physically active.	UG	IN	Internship
Spring 2008	ATR460	460	Adv Athletic Training	ATR	Athletic Training	4	This is the third course in a series of three. This course focuses on advanced athletic training principles, theories and techniques.	UG	LE	Lecture
Spring 2008	ATR461	461	Org&Adm of Athletic Trng	ATR	Athletic Training	4	Combines the knowledge of organization and administration and how it applies to the profession of athletic training.	UG	LE	Lecture
Spring 2008	ATR482	482	Pharmacology Ath Train	ATR	Athletic Training	3	This course is designed to provide the Athletic Training Student pharmacological information that pertains to the sports-medicine care of the physically active.	UG	LE	Lecture
Spring 2008	ATR484	484	Clin & Surgical Rotation	ATR	Athletic Training	3	Supervised field work for senior students seeking certification or a concentration in a specific area. Titles vary. Contact hours vary according to subject. May be taken for letter grade or pass/unsatisfactory.	UG	IN	Internship
Spring 2008	ATR484W	484W	Writing in ATR 484	ATR	Athletic Training	0	Required writing component for ATR 484.	UG	LB	Lab

Spring 2008	ATR485	485	Advanced Rehab Skills	ATR	Athletic Training	3	This is the seventh practicum in a series of nine to meet the competencies of athletic training. The emphasis will be on advanced rehabilitation programs. Limited to students in the ATR program.	UG	IN	Internship
Spring 2008	ATR485W	485W	Writing in ATR 485	ATR	Athletic Training	0		UG	LB	Lab
Spring 2008	ATR486	486	Medical Condition in ATR	ATR	Athletic Training	3	This is the ninth clinical/practicum course in a series of ten to meet the competencies of athletic training. The emphasis will be on general medical conditions and related basic skills. Concurrent enrollment in ATR 460.	UG	IN	Internship
Spring 2008	ATR487	487	Athletic Training Intern	ATR	Athletic Training	12	A culminating internship for student athletic trainers in one of the following settings: high school, college, sports medicine clinic, industrial, Olympic, or professional sports. The student can schedule this internship any quarter with the director of Athletic Training.	UG	IN	Internship
Spring 2008	AVI201	201	Private Pilot Ground Edu	AVI	Aviation	4	Forty hours of ground instruction covering radio navigation, meteorology, FAA regulations, communications, aircraft construction, and performance data to meet requirements of private pilot's written examination.	UG	LE	Lecture

Spring 2008	BIO101	101	Medical & Sci Terminology	BIO	Biology	4	Spelling, recognition and understanding contemporary specialized medical and scientific vocabulary that is based on the Latin and Greek languages. Emphasis on terminology of the medical sciences.	UG	LE	Lecture
Spring 2008	BIO105	105	Intro Bio: Food	BIO	Biology	4	Biological principles applied to the nature of food, its production, and use in the human body. Topics include molecular biology, photosynthesis, respiration, digestion, nutrition, agricultural ecosystems, and issues of feeding a rapidly growing human population. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	BIO105L	105L	Intro Bio: Food Lab	BIO	Biology	0	Required laboratory for BIO 105.	UG	LB	Lab
Spring 2008	BIO105W	105W	Writing in Bio 105	BIO	Biology	0		UG	LB	Lab
Spring 2008	BIO106	106	Intro Bio: Biodiversity	BIO	Biology	4	Biological principles and processes applied to the origin, interaction, and extinction of species. Laboratory and lab topics include paleobiology, speciation, macroevolution, adaptive radiation, symbiosis, biogeography, and the scientific management of modern biological resources. Three hours lecture, two hours lab.	UG	LE	Lecture

Spring 2008	BIO106L	106L	Intro Bio: Biodiversity Lab	BIO	Biology	0	Required laboratory for BIO 106.	UG	LB	Lab
Spring 2008	BIO106W	106W	Writing in BIO 106	BIO	Biology	0	Required writing component for BIO 106.	UG	LB	Lab
Spring 2008	BIO107	107	Intro Bio: Disease	BIO	Biology	4	Biological principles applied to the study of disease: causes, controls, and natural defense against infection. Topics include microscopy, pathology, antibiotics, immunology, and epidemiology with historical perspectives and an emphasis on investigative techniques. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	BIO107L	107L	Intro Bio: Disease Lab	BIO	Biology	0	Required laboratory for BIO 107.	UG	LB	Lab
Spring 2008	BIO107W	107W	Writing in BIO 107	BIO	Biology	0		UG	LB	Lab
Spring 2008	BIO111	111	Prin Bio Human Biology	BIO	Biology	4	Introduction to the basic concepts of biology. Emphasis on the anatomical and physiological organization of the human body, including applications to wellness, disease, and aging. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	BIO111L	111L	Prin Bio Human Biology Lab	BIO	Biology	0	Required laboratory for BIO 111.	UG	LB	Lab
Spring 2008	BIO112	112	Prin Bio Cell Bio&Genetic	BIO	Biology	4	Introduction to basic concepts of biology. Topics include genetics and the molecular and cellular basis for the unity of life. Three hours lecture, two hours lab.	UG	LE	Lecture

Spring 2008	BIO112L	112L	Prin Cell Bio & Genet Lab	BIO	Biology	0	Required laboratory for BIO 112.	UG	LB	Lab
Spring 2008	BIO112W	112W	Writing in BIO 112	BIO	Biology	0		UG	LB	Lab
Spring 2008	BIO115	115	Bio Evolution/Diversity	BIO	Biology	4	Introduction to basic concepts of biology. Topics include evolution, ecology, and the diversity of life. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	BIO115L	115L	Prin Bio Divrs & Ecol Lab	BIO	Biology	0	Required laboratory for BIO 115.	UG	LB	Lab
Spring 2008	BIO119	119	Honors Rec Prin Biology	BIO	Biology	1	Recitation/Discussion section to review basic concepts developed in the laboratory. Co-registration in lecture and honors laboratory required.	UG	RE	Recitation
Spring 2008	BIO194	194	Careers in EH, EXB, CL, BIO	BIO	Biology	1	Provide students with an overview of the programs and career options in Biology, Clinical Laboratory Science, Exercise Biology and Environmental Health Sciences.	UG	LE	Lecture
Spring 2008	BIO199	199	Intro-Bio Invenstigation	BIO	Biology	1	For individually motivated students at the introductory level who wish to pursue some particular project under faculty supervision. Graded pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	BIO201	201	Topics in Biology	BIO	Biology	1	Selected biological topics of current interest.	UG	IS	Independent Study
Spring 2008	BIO210	210	Molecular Biology	BIO	Biology	4	Emphasizes understanding of the chemical and physical aspects of molecular interactions and the flow of genetic information from DNA to protein.	UG	LE	Lecture

Spring 2008	BIO211	211	Molecular Genetics	BIO	Biology	4	Emphasizes understanding of the control of gene expression in both prokaryotes and eukaryotes. Includes study of chromosome structure, replication, recombination, and repair.	UG	LE	Lecture
Spring 2008	BIO212	212	Cell Biology	BIO	Biology	4	Emphasizes eukaryotic cell structure and function, including energetics and involvement of various organelles.	UG	LE	Lecture
Spring 2008	BIO213	213	Molecular Cell Lab Tech	BIO	Biology	3	Basic techniques in molecular and cellular biology, emphasizing acquisition and interpretation of data.	UG	RE	Recitation
Spring 2008	BIO213L	213L	Molecular Cell Lab Tech	BIO	Biology	0		UG	LB	Lab
Spring 2008	BIO213R	213R	Molecular Cell Lab Tech Rec	BIO	Biology	0	Required recitation for BIO 213.	UG	RE	Recitation
Spring 2008	BIO230	230	Organismal Physiology	BIO	Biology	4	Fundamentals of physiological processes in multicellular plants and animals, including bioenergetics, fluid dynamics, biomechanics and movement, signeal processing, and thermoregulation.	UG	LL	Lecture/Lab Combination
Spring 2008	BIO230L	230L	Organismal Phys Lab	BIO	Biology	0	Required laboratory for BIO 230.	UG	LB	Lab
Spring 2008	BIO230W	230W	Writing in BIO 230	BIO	Biology	0	Required writing component for BIO 230.	UG	LB	Lab

Spring 2008	BIO231	231	Introduction to Ecology	BIO	Biology	4	Introduction to ecology, the scientific study of the relationships between organisms and their natural environments. Three hours lecture, two hours lab including several outdoor lab experiences.	UG	LE	Lecture
Spring 2008	BIO231L	231L	Intro to Ecology Lab	BIO	Biology	0	Required laboratory for BIO 231.	UG	LB	Lab
Spring 2008	BIO231W	231W	Writing in BIO 231	BIO	Biology	0	Required writing component for BIO 231.	UG	LB	Lab
Spring 2008	BIO271	271	Intro to Bioinformatics	BIO	Biology	4	Tools-oriented approach in bioinformatics emphasizing DNA data structure, string representation in PERL, data searches, pairwise alignments, substitution patterns, protein structure prediction and modeling, proteomics, and use of web-based bioinformatic tools.	UG	LE	Lecture
Spring 2008	BIO278	278	Anat and Phys I	BIO	Biology	4.5	Lecture topics in human anatomy and physiology, including tissues; skeletal, muscular, nervous, and endocrine systems. Laboratory features cat dissection and physiological techniques complementary to the lecture topics.	UG	LE	Lecture
Spring 2008	BIO278L	278L	Anat and Phys I Lab	BIO	Biology	0	Required laboratory for BIO 278.	UG	LB	Lab

Spring 2008	BIO279	279	Anat and Phys II	BIO	Biology	4.5	Lecture topics in human anatomy and physiology including the cardiovascular, respiratory, digestive, excretory, and reproductive systems. Laboratory features cat dissection and physiological techniques complementary to the lecture topics.	UG	LE	Lecture
Spring 2008	BIO279L	279L	Anat and Phys II Lab	BIO	Biology	0	Required laboratory for BIO 279.	UG	LB	Lab
Spring 2008	BIO302	302	Genetics	BIO	Biology	4	The nature and function of genetic material with emphasis on transmission and population genetics. Exceptions to and extensions of Mendelian analysis, gene mapping, quantitative genetics, and the change of gene frequencies with time. Three hours lecture, one hour recitation.	UG	LR	Lecture/Recitation Combination
Spring 2008	BIO302R	302R	Genetics	BIO	Biology	0		UG	RE	Recitation
Spring 2008	BIO305	305	Animal Physiology	BIO	Biology	3	Basic adaptive mechanisms and their coordination in the activities of the metazoa.	UG	LE	Lecture
Spring 2008	BIO310	310	Clinical Microbiology	BIO	Biology	3	The study of biological processes of microorganisms, with emphasis on microorganisms that cause human disease (pathogens).	UG	LE	Lecture
Spring 2008	BIO311	311	Clinical Micro Bio Lab	BIO	Biology	2	The study of biological processes of microorganisms, with emphasis on microorganisms that cause human disease (pathogens).	UG	LB	Lab

Spring 2008	BIO312	312	Microbiology	BIO	Biology	5	Study of morphology, cultivation, and biochemical activities of microorganisms. Survey of viruses, bacteria, blue-green algae, fungi and their diversity in natural environments.	UG	LE	Lecture
Spring 2008	BIO312L	312L	Microbiology Lab	BIO	Biology	0		UG	LB	Lab
Spring 2008	BIO313	313	Bio of Lower Plants	BIO	Biology	5	Study of morphology; taxonomy; and ecology of algae, fungi and bryophytes. Emphasis on growth and development patterns, modes of reproduction, importance to humans and ecosystems, diversity, distribution, and phylogenetic relationships.	UG	LL	Lecture/Lab Combination
Spring 2008	BIO314	314	Bio of Vascular Plants	BIO	Biology	5	Study of form development, reproduction and life histories of vascular plants. Survey of representative plant families emphasizing phylogenetic relationships, distribution, and vegetational types in natural habitats.	UG	LL	Lecture/Lab Combination
Spring 2008	BIO314L	314L	BIO Lab	BIO	Biology	0		UG	LB	Lab
Spring 2008	BIO315	315	Bio of Invertebrates	BIO	Biology	5	Morphology, development, physiology and evolutionary relationships of major invertebrate groups.	UG	LL	Lecture/Lab Combination
Spring 2008	BIO315L	315L	BIO of Invertebrates Lab	BIO	Biology	0		UG	LB	Lab

Spring 2008	BIO316	316	Bio of Vertebrates	BIO	Biology	5	Introduction to the anatomy and evolutionary history of vertebrate animals.	UG	LL	Lecture/Lab Combination
Spring 2008	BIO316L	316L	Bio of Vertebrates Lab	BIO	Biology	0	Required laboratory for BIO 316.	UG	LB	Lab
Spring 2008	BIO345	345	Concepts in Biology	BIO	Biology	4.5	An accelerated treatment of fundamental concepts and applications of biology for Elementary Education majors. Topics and activities organized specifically to prepare students for science teaching at levels K-8. For elementary education majors only. Integrated lecture/lab.	UG	LL	Lecture/Lab Combination
Spring 2008	BIO346	346	Concepts in Biology II	BIO	Biology	4.5	Concepts and applications of biology formatted to model implications of state and national pedagogical standards, aimed specifically at preparing students for biology teaching in Grades 4-9. For Middle Childhood Education majors only. Integrated lecture/lab.	UG	LL	Lecture/Lab Combination
Spring 2008	BIO380	380	Conservation Biology	BIO	Biology	3	Examination of the scientific theory and applied research focused on the sustained preservation of global biological diversity.	UG	LE	Lecture

Spring 2008	BIO399	399	Undergrad Teaching Asst	BIO	Biology	1	Supervised experience in preparing materials and apparatus for laboratory sessions in the biological sciences. Students will work with course staff on a regularly scheduled basis to develop the practices and skills associated with laboratory teaching responsibility and assist course staff in teaching the laboratory. May be repeated for up to three credits. Graded pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	BIO401	401	Topics in Modern Biology	BIO	Biology	1	Advanced topics in modern biology of current interest. Topics vary.	UG	IS	Independent Study
Spring 2008	BIO401W	401W	Writing in BIO 401	BIO	Biology	0		UG	LB	Lab
Spring 2008	BIO402	402	Current Lit in Biology	BIO	Biology	3	Writing intensive course using current research articles to develop critical thinking skills, designed for advanced undergraduates, or beginning graduate students. Four different sections emphasize broad areas of biology.	UG	SE	Seminar
Spring 2008	BIO403	403	Developmental Biology	BIO	Biology	5	Describes underlying processes that initiate, in plants and animals, the development of tissues and the whole organism. Laboratory exercises highlight developmental processes. Three hours lecture, four hours lab.	UG	LB	Lab

Spring 2008	BIO403	403	Developmental Biology	BIO	Biology	5	Describes underlying processes that initiate, in plants and animals, the development of tissues and the whole organism. Laboratory exercises highlight developmental processes. Three hours lecture, four hours lab.	UG	LE	Lecture
Spring 2008	BIO403L	403L	Develop Biology Lab	BIO	Biology	0	Required laboratory for BIO 403.	UG	LB	Lab
Spring 2008	BIO404	404	Basic Electron Microscopy	BIO	Biology	6	Basic theory and practical experience in transmission electron microscopic technology. Animal, plant, and particulate specimens are processed in the laboratory.	UG	LE	Lecture
Spring 2008	BIO404L	404L	Eletron Microscopy Lab	BIO	Biology	0	Required laboratory for BIO 404.	UG	LB	Lab
Spring 2008	BIO406	406	Evolutionary Biology	BIO	Biology	3	Historical development and current understanding of the principles of evolution.	UG	LE	Lecture
Spring 2008	BIO407	407	Wetlands Biology	BIO	Biology	5	Ecological investigation of wetlands of United States, with emphasis on Midwest. Primarily field oriented and some lecture. Covers soils, vegetation, hydrology, conservation, and restoration.	UG	LL	Lecture/Lab Combination
Spring 2008	BIO408	408	Writing in the Bio Sci	BIO	Biology	3	Surveys grammatical and stylistic aspects of scientific writing and teaches students how to organize, write, and submit a manuscript for publication in a biological journal. Writing grants will also be discussed.	UG	LE	Lecture

Spring 2008	BIO408W	408W	Writing in BIO 408	BIO	Biology	0	Required writing component for BIO 408.	UG	LB	Lab
Spring 2008	BIO411	411	The Aquatic Environment	BIO	Biology	5	Introduction to limnology. Field and laboratory course concerned with physical, chemical, and biological factors that characterize natural waters.	UG	LE	Lecture
Spring 2008	BIO411L	411L	Aquatic Environment Lab	BIO	Biology	0	Required laboratory for BIO 411.	UG	LB	Lab
Spring 2008	BIO411W	411W	Writing in BIO 411	BIO	Biology	0	Required writing component for BIO 411.	UG	LB	Lab
Spring 2008	BIO414	414	Terrestrial Communities	BIO	Biology	5		UG	LE	Lecture
Spring 2008	BIO415	415	Intro to Toxicology	BIO	Biology	4	Covers toxicological problems encountered in the field of environmental health. Emphasis on monitoring, control, and regulation of toxic substances in air and water and in industrial environments. Completion of a course in physiology and in organic chemistry required.	UG	LE	Lecture
Spring 2008	BIO420	420	Designing Bio Experiments	BIO	Biology	3	Principles of effective sampling design for biological experiments. Reconciling the peculiarities of biological data with the assumptions of statistical methods. Lectures and problem sets.	UG	LE	Lecture
Spring 2008	BIO420R	420R	Designing Bio Exper Rec	BIO	Biology	0	Required recitation for BIO 420.	UG	RE	Recitation
Spring 2008	BIO420W	420W	Writing in Bio 420	BIO	Biology	0		UG	LB	Lab

Spring 2008	BIO421	421	Human Genet Health Profs	BIO	Biology	3	Describes mechanism of inheritance and genetic diseases so that health professionals can recognize possible genetic abnormalities and make appropriate referrals, participate in genetic counseling, and consider ethical and legal implications of the "new genetics." For nonmajors only.	UG	LE	Lecture
Spring 2008	BIO426	426	Human Genetics	BIO	Biology	4	Nature of human genetic traits, methods of analysis and inheritance.	UG	LE	Lecture
Spring 2008	BIO434	434	Biological Safety	BIO	Biology	2	The basic principles and practices of biosafety are examined. This course teaches the identification, handling, and containment of potentially hazardous biological materials, including microorganisms and recombinant DNA.	UG	LE	Lecture
Spring 2008	BIO437	437	Recombinant DNA Methods	BIO	Biology	6	(Also listed as BMS 790, BIO 737, M&I 437, M&I 737.) Microbial and molecular techniques for producing, cloning, and characterizing recombinant DNA molecules. Laboratory exercises in gene manipulation give an understanding of the principles of genetic engineering.	UG	LB	Lab

Spring 2008	BIO441	441	Endocrinology	BIO	Biology	3	A survey course that focuses on major topics in endocrinology. Topics range from the overall workings of the hypothalamo-hypophsial axis to comparative aspects of reproductive endocrinology.	UG	LE	Lecture
Spring 2008	BIO442	442	Adv Molecular Bio	BIO	Biology	3	Topics emphasizing gene organization and genome organization will center on the molecular anatomy, expression, and regulation of eukaryotic genes. Includes a thorough discussion of recombinant DNA technology.	UG	LE	Lecture
Spring 2008	BIO443	443	Vertebrate Histiology	BIO	Biology	5	Study of structure/function relationships in vertebrate tissues, organs and organ systems.	UG	LE	Lecture
Spring 2008	BIO443L	443L	Lab in Vertebrate Histiology	BIO	Biology	0		UG	LB	Lab
Spring 2008	BIO443W	443W	Writing in BIO 443	BIO	Biology	0		UG	LB	Lab
Spring 2008	BIO444	444	Plant Physiology	BIO	Biology	5	Special aspects of plant physiology that set plants apart from other organisms. Laboratory introduces independent research concerning plant nutrition and bud development.	UG	LL	Lecture/Lab Combination
Spring 2008	BIO444L	444L	Plant Physiology Lab	BIO	Biology	0	Required laboratory for BIO 444.	UG	LB	Lab
Spring 2008	BIO444W	444W	Writing in BIO 444	BIO	Biology	0	Required writing component for BIO 444.	UG	LB	Lab

Spring 2008	BIO445	445	Plants & The Environment	BIO	Biology	3	The course covers the effects of abiotic and biotic environmental stressors on plants in natural and agro-ecosystems and the mechanisms that plants use to combat damage by these stresses.	UG	LE	Lecture
Spring 2008	BIO446	446	Advanced Cell Biology	BIO	Biology	3	Cell structure/function including the organization of the cell nucleus, DNA replication, multiple steps of gene expression, membrande composition and the importance of the cytoskeleton for cell motility, cell division and cell adhesion.	UG	LE	Lecture
Spring 2008	BIO452	452	Exercise Pharmacology	BIO	Biology	3	Exercise pharmacology concerns the effect of exercise on the therapeutic actions of commonly used prescriptions and over-the-counter drugs. The effect of drugs on athletic performance is also emphasized.	UG	LE	Lecture
Spring 2008	BIO455	455	Plant Systematics	BIO	Biology	3	A survey of topics and techniques encountered in studies of the relationships and evolution of the higher plants, emphasizing the flowering plants.	UG	LE	Lecture

Spring 2008	BIO456	456	Biology of Ecosystems	BIO	Biology	3	Students will study the development of the ecosystem concept and the traditional ways in which organisms can alter ecosystem dynamics through physical or chemical interactions with their environments.	UG	LE	Lecture
Spring 2008	BIO460	460	Population Genetics	BIO	Biology	3	Examination of the causes of genetic differences within and among species and how molecular biology techniques can be used to identify these differences. Emphasizes human genetics, anthropology, ecology, and conservation implications.	UG	LE	Lecture
Spring 2008	BIO461	461	Molecular Evolution	BIO	Biology	3	Studies the evolutionary history of organisms by interpreting their genomes as historical documents. Focuses on the origins of human traits and diseases, phylogenetic reconstruction, and systematics.	UG	LE	Lecture
Spring 2008	BIO464	464	Microbiology of Food	BIO	Biology	3	Principles of food microbiology, preservation, and handling. Major organisms of food poisoning and means of control are considered.	UG	LE	Lecture
Spring 2008	BIO470	470	General Entomology	BIO	Biology	3	Basic study of morphology, physiology, habits and classification of insects. Some discussion of pesticide toxicology and insect management included.	UG	LE	Lecture

Spring 2008	BIO471	471	Bioinformatic Algorithms	BIO	Biology	4	Theory-oriented approach to application of contemporary algorithms to bioinformatics. Graph theory, complexity theory, dynamic programming and optimization techniques are introduced for solving specific computational problems in molecular genetics.	UG	LE	Lecture
Spring 2008	BIO473	473	Bio Selected Marine Env	BIO	Biology	5	Biological aspects of marine environments. Sampling and observation of living marine specimens during week-long trip to marine laboratory.	UG	LE	Lecture
Spring 2008	BIO475	475	Microbiology of Food Lab	BIO	Biology	2	Methods for evaluating microbial quality of food. Includes investigation of major pathogens, and techniques and principles of processing food. Completion of a laboratory course in general microbiology required.	UG	LB	Lab
Spring 2008	BIO476	476	Human Parasitology	BIO	Biology	2	Study of aspects of parasitology including biology, epidemiology, diagnosis, and identification of parasites. Divided into three major categories: protozoology, helminthology, and arthropodology.	UG	LE	Lecture
Spring 2008	BIO477	477	Human Parasitology Lab	BIO	Biology	3	Examination and identification of protozoan, helminthic, and arthropod parasites of humans.	UG	LB	Lab

Spring 2008	BIO484	484	Biogeography	BIO	Biology	3	(Also listed as GEO 484.) Introduction to the factors affecting the distribution of plants and animals.	UG	LE	Lecture
Spring 2008	BIO488	488	Independent Reading	BIO	Biology	1	Graded pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	BIO490	490	Biology Internship	BIO	Biology	9	Off-campus experience in cooperating scientific agency or industrial organization. Reports and specific assignments determined in consultation with faculty advisor and supervising professionals.	UG	IS	Independent Study
Spring 2008	BIO492	492	Senior Seminar	BIO	Biology	2	Literature survey, discussion, and oral presentations of selected topics in the biological sciences. Course requires written presentations when offered for two credits and one recitation.	UG	SE	Seminar
Spring 2008	BIO492W	492W	Writing in BIO 492	BIO	Biology	0	Required writing component for BIO 492.	UG	LB	Lab
Spring 2008	BIO495	495	Senior Honors Research	BIO	Biology	1		UG	IS	Independent Study
Spring 2008	BIO499	499	Special Prob in Biology	BIO	Biology	1		UG	IS	Independent Study
Spring 2008	BIO521	521	Human Genet Health Profs	BIO	Biology	3	Describes mechanisms of inheritance and genetic diseases so that health professionals can recognize possible genetic abnormalities and make appropriate referrals, participate in genetic counseling, and consider ethical and legal implications of the "new genetics." For nonmajors only.	GR	LE	Lecture

Spring 2008	BIO545	545	Concepts in Biology	BIO	Biology	4.5	An accelerated treatment of fundamental concepts and applications of biology for Elementary Educaiton majors. Topics and activities organized specifically to prepare students for science teaching at levels K-8. For Educaiton Majors only.	GR	LL	Lecture/Lab Combination
Spring 2008	BIO545	545	Concepts in Biology	BIO	Biology	4.5	An accelerated treatment of fundamental concepts and applications of biology for Elementary Educaiton majors. Topics and activities organized specifically to prepare students for science teaching at levels K-8. For Educaiton Majors only.	GR	LE	Lecture
Spring 2008	BIO546	546	Concepts in Biology II	BIO	Biology	4.5	Concepts and applications of biology formatted to model implications of state and national pedagogical standards, aimed specifically at preparing students for biology teaching in grades 4-9. For Middle Childhood Majors only.	GR	LL	Lecture/Lab Combination
Spring 2008	BIO602	602	Current Lit in Biology	BIO	Biology	3	Writing intensive course using current research articles to develop critical thinking skills designed for advanced undergraduates or graduate students. Four different sections emphasize broad areas of biology.	GR	SE	Seminar

Spring 2008	BIO603	603	Developmental Biology	BIO	Biology	5	(Also listed as BMS 839.) Describes underlying processes that initiate, in plants and animals, the development of tissue and whole organisms.	GR	LE	Lecture
Spring 2008	BIO603L	603L	Developmental Biology Lab	BIO	Biology	0	Required laboratory for BIO 603.	GR	LB	Lab
Spring 2008	BIO606	606	Evolutionary Biology	BIO	Biology	3	Historical development and current understanding of the principles of evolution.	GR	LE	Lecture
Spring 2008	BIO607	607	Wetlands Biology	BIO	Biology	5	Ecological investigation of wetlands of the U.S. with emphasis on the Midwest. Primarily field oriented with some lecture. Covers soils, vegetation, hydrology, conservation, and restoration. Requires two weekend trips and written report.	GR	LL	Lecture/Lab Combination
Spring 2008	BIO608	608	Writing in the Bio Sci	BIO	Biology	3	Surveys grammatical and stylistic aspects of scientific writing and teaches how to organize, write, and submit a manuscript for publication in a biological journal. Grant writing is also discussed.	GR	LE	Lecture
Spring 2008	BIO611	611	The Aquatic Environment	BIO	Biology	5	Field and laboratory course concerned with the physical, chemical, and biological factors that determine biological productivity in natural waters. 3 hours lecture, 6 hours lab.	GR	LE	Lecture
Spring 2008	BIO611L	611L	The Aquatic Environ Lab	BIO	Biology	0	Required laboratory for BIO 611.	GR	LB	Lab

Spring 2008	BIO612L	612L	Aquatic Communties Lab	BIO	Biology	0	Required laboratory for BIO 612.	GR	LB	Lab
Spring 2008	BIO613L	613L	Bio Prob-Water Pol Lab	BIO	Biology	0	Required laboratory for BIO 613.	GR	LB	Lab
Spring 2008	BIO614	614	Terrestrial Communities	BIO	Biology	5		GR	LE	Lecture
Spring 2008	BIO615	615	Environmental Toxicology	BIO	Biology	4	Covers toxicological problems encountered in the field of environmental health. Emphasis on monitoring, control, and regulation of toxic substances in air and water, and in industrial environments. 3 hours lecture, 1 hour recitation.	GR	LR	Lecture/Recitation Combination
Spring 2008	BIO616	616	Ecotoxicology	BIO	Biology	4	Study of the effects of environmental contaminants on aquatic and terrestrial organisms. Effects on the biochemical and physiological levels are related to impacts on individuals, populations, and ecosystems. Current approaches for assessing ecotoxicity are presented.	GR	LE	Lecture
Spring 2008	BIO620	620	Designing Bio Experiments	BIO	Biology	3	Principles of effective sampling design for biological experiments. Reconciling the peculiarities of biological data with the assumptions of statistical methods. Lectures and problem sets.	GR	LR	Lecture/Recitation Combination
Spring 2008	BIO625L	625L	Microbial Ecology Lab	BIO	Biology	0	Required laboratory for BIO 625.	GR	LB	Lab

Spring 2008	BIO626	626	Human Genetics	BIO	Biology	4	(Also listed as BMS 780.) Nature of human genetic traits; methods of analysis of inheritance.	GR	LE	Lecture
Spring 2008	BIO641	641	Vertebrate Endocrinology	BIO	Biology	3	A survey course that focuses on major topics in endocrinology. Topics range from the overall workings of the hypothalamo-hypophysial axis to comparative aspects of reproductive endocrinology.	GR	LE	Lecture
Spring 2008	BIO642	642	Adv Molecular Bio	BIO	Biology	3	Emphasizes gene organization and genome organization focusing on the molecular anatomy, expression, and regulation of eukaryotic genes. Includes a thorough discussion of recombinant DNA technology.	GR	LE	Lecture
Spring 2008	BIO643	643	Verterbrate Histiology	BIO	Biology	5	Study of structure/function relationships in vertebrate tissues, organs and organ systems.	GR	LE	Lecture
Spring 2008	BIO643L	643L	Lab in Vertebrate Histiology	BIO	Biology	0		GR	LB	Lab
Spring 2008	BIO644	644	Plant Physiology	BIO	Biology	5	Special aspects of plant physiology that set plants apart from other organisms. Laboratory introduces independent research concerning plant nutrition and bud development.	GR	LL	Lecture/Lab Combination
Spring 2008	BIO644L	644L	Plant Physiology Lab	BIO	Biology	0	Required laboratory for BIO 644.	GR	LB	Lab

Spring 2008	BIO645	645	Plants and the Environment	BIO	Biology	3	This course covers the effects of abiotic and biotic environmental stressors on plants in natural and agro-ecosystems, and the mechanisms the plants use to combat damage by these stresses.	GR	LE	Lecture
Spring 2008	BIO646	646	Advanced Cell Biology	BIO	Biology	3	Students will gain a thorough understanding about eukaryotic cell structures and functions including the organization of the cell nucleus, DNA replication, the multiple steps of gene expression, membrane composition and dynamics, and the importance of the cytoskeleton for cell motility, cell division and cell adhesion.	GR	LE	Lecture
Spring 2008	BIO652	652	Env Prot: Law, Regul&Enfor	BIO	Biology	3	Reviews the American legal system, emphasizing regulatory agencies and the courts; environmental and toxic tort case law; and the complex way that the myriad environmental laws and regulations are structured and enforced. Titles vary.	GR	LE	Lecture
Spring 2008	BIO655	655	Plant Systematics	BIO	Biology	3	A survey of topics and techniques encountered in studies of the relationship and evolution of the higher plants, emphasizing the flowering plants.	GR	LE	Lecture

Spring 2008	BIO656	656	Biology of Ecosystems	BIO	Biology	3	This course will study the development of the ecosystem concepts and the traditional ways in which organisms can alter ecosystem dynamics through physical or chemical interactions with the enviroments.	GR	LE	Lecture
Spring 2008	BIO660	660	Population Genetics	BIO	Biology	3	Examination of the causes of genetic differences within and among species and how molecular biology techniques can be used to identify these differences. Emphasized human genetics, anthropology, ecology and conservation implications.	GR	LE	Lecture
Spring 2008	BIO661	661	Molecular Evolution	BIO	Biology	3	Studies the evolutionary history of organisms by interpreting their genomes as historical documents. Focuses on the origins of human traits and diseases, phylogenetic reconstruction and systematics.	GR	LE	Lecture
Spring 2008	BIO664	664	Microbiology of Food	BIO	Biology	3	Principles of food microbiology, preservation, and handling. Major organisms of food poisoning and means of control are considered.	GR	LE	Lecture
Spring 2008	BIO670	670	Entomology	BIO	Biology	3	Basic study of morphology, physiology, habits and classification of insects. Some discussion of pesticides, toxicology, and insect management included.	GR	LE	Lecture

Spring 2008	BIO673	673	Bio of Selected Marine En	BIO	Biology	5	Biological aspects of marine environments. Sampling and observation of living marine specimens during week-long trip to a marine laboratory.	GR	LE	Lecture
Spring 2008	BIO675	675	Microbiology of Food Lab	BIO	Biology	2	Methods for evaluating microbial quality of food. Includes investigation of major pathogens, techniques, and principles of processing food. Field trips required. Completion of a laboratory course in general microbiology required.	GR	LB	Lab
Spring 2008	BIO676	676	Human Parasitology	BIO	Biology	2	(Also listed as BMS 799.) Study of the medical aspects of parasitology, such as pathology, symptomatology, diagnosis, and identification of parasites. Course content is divided into three major categories: human protozoology, human helminthology, and human arthropodology. Designed primarily for medical technologists, biology teachers, and environmental health students.	GR	LE	Lecture
Spring 2008	BIO677	677	Human Parasitology Lab	BIO	Biology	3	Laboratory course designed to examine and identify protozoan, helminthic, and arthropod parasites of humans.	GR	LB	Lab
Spring 2008	BIO684	684	Biogeography	BIO	Biology	3	Introduction to the factors affecting the distribution of plants and animals.	GR	LE	Lecture

Spring 2008	BIO699	699	Special Prob in Biology	BIO	Biology	1	A maximum of 4 credits is applicable toward degree requirements.	GR	IS	Independent Study
Spring 2008	BIO700	700	Prin Instruction Biology	BIO	Biology	1	Survey of available instructional materials and discussion of educational theory and techniques leading to more effective instruction.	GR	LE	Lecture
Spring 2008	BIO701	701	Selected Topics in Bio	BIO	Biology	1	Topics vary.	GR	LE	Lecture
Spring 2008	BIO701	701	Selected Topics in Bio	BIO	Biology	1	Topics vary.	GR	IS	Independent Study
Spring 2008	BIO702	702	Intro to Research Biology	BIO	Biology	2	Different research problems under investigation by the faculty are described with respect to objectives, methodology, and progress as examples of scientific methods applied to biology.	GR	LE	Lecture
Spring 2008	BIO703	703	Advanced Development Bio	BIO	Biology	4	Molecular mechanism of development including topics such as cell signaling, pattern formation, terminal differentiation.	GR	LE	Lecture
Spring 2008	BIO720	720	Mammalian Cell Biology	BIO	Biology	4	(Also listed as BMS 835.) A comprehensive course addressing both the known and theoretical aspects of cellular organization and function. Suitable as an introductory course for graduate study.	GR	LE	Lecture
Spring 2008	BIO730	730	Cell Biology	BIO	Biology	4	(Also listed as BMS 778.) Provides a survey of basic concepts that are most important for understanding how cells function.	GR	LE	Lecture

Spring 2008	BIO734	734	Molecular Genetics	BIO	Biology	3	(Also listed as BMS 779.) Study of the replication, organization, and function of nucleic acids with emphasis on the role of nucleic acids in protein synthesis.	GR	LE	Lecture
Spring 2008	BIO737	737	Recombinant DNA Methods	BIO	Biology	6	(Also listed as BMS 790 and M&I 737.) Microbial and molecular techniques for producing, cloning, and characterizing recombinant DNA molecules; laboratory exercises in gene manipulation to give an understanding of the principles of genetic engineering. Graded pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	BIO740	740	Electron Microscopy LS	BIO	Biology	6	(Also listed as BMS 834.) Introduction to theoretical and practical aspects of transmission electron microscopy. Emphasizes interpretation and evaluation of electron micrographs. 3 hours lecture, 6 hours lab; additional lab time is required. Completion of course in histology or cell biology is required.	GR	LL	Lecture/Lab Combination
Spring 2008	BIO789	789	Continuing Registration	BIO	Biology	1	Maintenance of contacts with department. Fulfills university requirement that student must be registered for at least one hour of graduate credit during the quarter in which they successfully defend their thesis.	GR	IS	Independent Study

Spring 2008	BIO799	799	Literature Critique	BIO	Biology	1	Independent project to write a critical review of literature on a specific topic. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	BIO800	800	Graduate Seminar	BIO	Biology	1	Topics vary.	GR	SE	Seminar
Spring 2008	BIO899	899	Grad Research	BIO	Biology	2	Supervised thesis research.	GR	IS	Independent Study
Spring 2008	BMB250	250	Human Nutrition	BMB	Biochem & Molecular Biology	4	Nutrition as an integrated science emphasizing biochemical and physiological principles. Topics include nutritional energetics, specific nutrients, and nutrition and physiology. Relation of basic concepts to clinical situations and to nutritional management of specific disease conditions.	UG	LE	Lecture
Spring 2008	BMB401	401	Topics in BMB	BMB	Biochem & Molecular Biology	1		UG	IS	Independent Study
Spring 2008	BMB421	421	Biochemistry I	BMB	Biochem & Molecular Biology	4	Chemistry of biological compounds and introduction to enzymes.	UG	LE	Lecture
Spring 2008	BMB421R	421R	Biochemistry I Rec	BMB	Biochem & Molecular Biology	0	Required recitation for BMB 421.	UG	RE	Recitation
Spring 2008	BMB423	423	Biochemistry II	BMB	Biochem & Molecular Biology	4	Intermediary metabolism of carbohydrates, proteins, nucleic acids, and lipids.	UG	LE	Lecture
Spring 2008	BMB423R	423R	Biochemistry II Rec	BMB	Biochem & Molecular Biology	0	Required recitation for BMB 423.	UG	RE	Recitation

Spring 2008	BMB427	427	Human Biochemistry	BMB	Biochem & Molecular Biology	4	Metabolism of hormones and amino acids, integration of metabolism, and aspects of human biochemistry including some metabolic disorders and nutrition.	UG	LE	Lecture
Spring 2008	BMB488	488	Independent Reading	BMB	Biochem & Molecular Biology	1		UG	IS	Independent Study
Spring 2008	BMB495	495	Biochem Honors Research	BMB	Biochem & Molecular Biology	1	Laboratory experience in biochemistry. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	BMB499	499	Undergraduate Research	BMB	Biochem & Molecular Biology	1	May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	BMB601	601	Biochemistry Research	BMB	Biochem & Molecular Biology	2		MD	LL	Lecture/Lab Combination
Spring 2008	BMB627	627	Human Biochemistry	BMB	Biochem & Molecular Biology	4	Metabolism of hormones and amino acids. Integration of metabolism. Aspects of human biochemistry including some metabolic disorders and nutrition.	GR	LE	Lecture
Spring 2008	BMB699	699	Spec Problems in Biochem	BMB	Biochem & Molecular Biology	1	Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	BMB701	701	Selected Topics-Biochem	BMB	Biochem & Molecular Biology	1		GR	IS	Independent Study

Spring 2008	BMB702	702	Research Perspectives	BMB	Biochem & Molecular Biology	4	Designed to acquaint new graduate students with the research being carried out by the faculty in the biochemistry program.	GR	LE	Lecture
Spring 2008	BMB703	703	Research Ethics	BMB	Biochem & Molecular Biology	1	(Also listed as BMS 703.) Research ethics emphasizes the evaluation of hypothetical ethical scenarios. Class discussion is based on integrating ethical policy and practices as they relate to research at Wright State. Graded pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	BMB726	726	Bioenergetics	BMB	Biochem & Molecular Biology	4	Structure of energy transducing membranes of mitochondria, chloroplasts and bacteria. Particular emphasis placed on mechanisms of energy transduction, thermodynamics of oxidation-reduction reactions, biophysical spectroscopic methods, structure and surface topography of membrane proteins.	GR	LE	Lecture
Spring 2008	BMB727	727	Proteins and Gnzymology	BMB	Biochem & Molecular Biology	4	(Also listed as BMS 767.) Current concepts of the mechanism of enzyme catalysis including such topics as structure, kinetics, energetics, allosterism, coenzymes, and control of enzymes and multienzyme systems.	GR	LE	Lecture

Spring 2008	BMB731	731	Biochemistry of Membranes	BMB	Biochem & Molecular Biology	4	(Also listed as BMS 769.) Examines the biochemistry of membranes and provides basic information on membrane composition and processes.	GR	LE	Lecture
Spring 2008	BMB740	740	Physical Biochemistry	BMB	Biochem & Molecular Biology	4	(Also listed as BMS 770.) Structure-function analysis of biological macromolecules (particularly proteins and polynucleotides) based on chemical and physical properties.	GR	LE	Lecture
Spring 2008	BMB750	750	Molecular Biochemistry I	BMB	Biochem & Molecular Biology	1	(Also listed as BMS 750.) Survey course emphasizing an experimental and problem-solving approach to buffers, protein structure, enzymes, and carbohydrate and lipid metabolism. Completion of organic chemistry course or permission of instructor required.	GR	LE	Lecture
Spring 2008	BMB752	752	Molecular Biochemistry II	BMB	Biochem & Molecular Biology	1	(Also listed as BMS 752.) Survey course emphasizing an experimental and problem-solving approach to amino acid metabolism, nucleic-acid function, and hormones.	GR	LE	Lecture
Spring 2008	BMB753	753	Molecular Signalling	BMB	Biochem & Molecular Biology	4	(Also listed as BMS 753.) A molecular analysis of information transfer into and within cells. Topics include visual transduction, hormones, hormone receptors, second messengers, regulation of transcription, and oncogenes. Readings from current scientific literature.	GR	LE	Lecture

Spring 2008	BMB755	755	Cancer: Molecular Aspects	BMB	Biochem & Molecular Biology	3	A profile of the general properties of transformed cells and an in-depth examination of the mechanisms of oncogenesis at the level of molecular genetics.	GR	LE	Lecture
Spring 2008	BMB760	760	Molec Bio of the Nucleus	BMB	Biochem & Molecular Biology	4	(Also listed as BMS 760.) A literature based course covering molecular events in the nucleus including DNA replication, repair and recombination and transcription.	GR	LE	Lecture
Spring 2008	BMB763	763	NMR Spectro & Imaging	BMB	Biochem & Molecular Biology	3	(Also listed as BMS 763.) Discusses the applications of NMR spectroscopy to the study of tissue metabolism in vivo. The fundamental theory of magnetic resonance imaging, with a survey of clinical applications, is also presented.	GR	LE	Lecture
Spring 2008	BMB765	765	Comp Tools/Strategies BMS	BMB	Biochem & Molecular Biology	4	This is a survey course of modern computational tools and strategies used in sequence, 3-D structure and functional analysis of biomolecules. Students will gain hands on "laboratory" experience with key software and strategies.	GR	LE	Lecture
Spring 2008	BMB777	777	Gene Therapy	BMB	Biochem & Molecular Biology	4		GR	LE	Lecture

Spring 2008	BMB789	789	Continuing Registration	BMB	Biochem & Molecular Biology	1		GR	IS	Independent Study
Spring 2008	BMB800	800	Biochemistry Seminar	BMB	Biochem & Molecular Biology	1	Topics vary. Graded pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	BMB899	899	Biochemistry Research	BMB	Biochem & Molecular Biology	1	Supervised thesis research.	GR	IS	Independent Study
Spring 2008	BMB900	900	Biochemistry Seminar	BMB	Biochem & Molecular Biology	1	Topics vary. Graded pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	BME155	155	Adaptive Comput Tech	BME	Biomedical Engineering	4	Presented for physically impaired students for the purpose of familiarizing them with adaptive computer usage. It is structured to teach necessary skills related to each student's rehabilitative needs.	UG	LE	Lecture
Spring 2008	BME155L	155L	Adapt Comput Tech Lab	BME	Biomedical Engineering	0	Required laboratory for BME 155.	UG	LB	Lab
Spring 2008	BME195	195	Fundamentals of BME	BME	Biomedical Engineering	2	This is an introduction to the study of Biomedical Engineering. The broad areas of BME are presented through lecture and demonstration. Department faculty provides interesting insights in their areas of expertise.	UG	LE	Lecture

Spring 2008	BME199	199	Special Topics in BME	BME	Biomedical Engineering	1	Special topics in Biomedical Engineering are offered periodically on subjects that are of current interest. In some cases a student may take this as an individual study course, the subject matter will vary from year to year. Check with the department on type of courses currently being offered.	UG	LE	Lecture
Spring 2008	BME300	300	Honors Program Seminar	BME	Biomedical Engineering	0	An orientation course intended for juniors who have demonstrated exceptional academic ability and desire to conduct meaningful independent research or solve unique engineering design projects during their senior year. Meets 5 times a quarter.	UG	SE	Seminar
Spring 2008	BME402	402	BME Design II Lab	BME	Biomedical Engineering	2	Design project teams will meet with their advisor(s) on a weekly basis to review progress, make assignments, and further incubate students with design methods.	UG	LB	Lab
Spring 2008	BME403	403	BME Design III Lab	BME	Biomedical Engineering	2	Design project teams will meet with their advisor(s) on a weekly basis to review progress, make assignments, and further incubate students with design methods.	UG	LB	Lab
Spring 2008	BME403W	403W	Writing in BME 403	BME	Biomedical Engineering	0		UG	LB	Lab

Spring 2008	BME419	419	Biofluid Mechanics	BME	Biomedical Engineering	3	Derivation and use of the basic conservation laws underlying the fluid mechanical behavior of the cardiopulmonary system. Includes applications to the flows of blood, pulmonary air, and extra-corporeal fluids.	UG	LE	Lecture
Spring 2008	BME420	420	BME Heat & Mass Transfer	BME	Biomedical Engineering	3	Introduction to transport phenomena in biomedical engineering and physiological systems. Energy and mass balances together with constitutive and empirical relationships are used in quantifying such topics as body heat loss by the various modes, diffusion mass transport, and heat/mass transport in applicable technological systems.	UG	LE	Lecture
Spring 2008	BME422	422	Engineering Biophysics	BME	Biomedical Engineering	4	Application of mathematical and engineering techniques toward describing biophysical systems. Topics include cellular transport, electrical properties of membranes, and biophysics of muscle contraction.	UG	LE	Lecture

Spring 2008	BME428	428	Biomech & Bioenergetics	BME	Biomedical Engineering	5	Application of solid mechanics (statics/dynamics) toward the description and analysis of physiological systems. Topics include mechanics of the musculo-skeletal system, human motion and collision, introductory material mechanics, human heat generation, transfer and measurement.	UG	LE	Lecture
Spring 2008	BME439	439	Biotransport Art Org	BME	Biomedical Engineering	4	Introduction to transport processes vital to the design of medical devices for artificial intervention into living systems. Topics include circulatory system dynamics, mathematical modeling of physiological systems, membrane transport, and biological/artificial organ design.	UG	LL	Lecture/Lab Combination
Spring 2008	BME439L	439L	Biotransport Art Org Lab	BME	Biomedical Engineering	0	Required laboratory for BME 439.	UG	LB	Lab

Spring 2008	BME440	440	Biomaterials	BME	Biomedical Engineering	4	Application of properties of materials and solid mechanics to problems and design of medical implants, external prostheses, and living tissues. Topics include mechanical properties of biologic and synthetic materials, stress-strain analysis, viscoelasticity, tissue response to implants and vice versa, and implant materials for interfacing with hard and soft tissues and blood.	UG	LE	Lecture
Spring 2008	BME440L	440L	Biomaterials Lab	BME	Biomedical Engineering	0	Required laboratory for BME 440.	UG	LB	Lab
Spring 2008	BME460	460	Biomedical Electronics	BME	Biomedical Engineering	5	Employment of modern electronic devices and circuits as applied to instrumentation and data collection associated with biomedical applications and related fields. The course includes bio-electronic laboratory component, which emphasizes a hands-on active learning.	UG	LE	Lecture
Spring 2008	BME460L	460L	Biomedical Electronics Lab	BME	Biomedical Engineering	0	Required laboratory for BME 460.	UG	LB	Lab

Spring 2008	BME461	461	Bioinstrumentation I	BME	Biomedical Engineering	4	Principles of design and analysis of electronic instrumentation for medical applications. Topics include various electrodes/transducers for physiological measurement, imaging modalities, systems, and electrical safety.	UG	LE	Lecture
Spring 2008	BME461L	461L	Bioinstrumentation I Lab	BME	Biomedical Engineering	0	Required laboratory for BME 461.	UG	LB	Lab
Spring 2008	BME462	462	Bioinstrumentation II	BME	Biomedical Engineering	4	Continuation of principles of design and analysis of electronic instrumentation for medical applications. Topics include various electrodes/transducers for physiological measurement and electrical stimulation, biological signal acquisition and processing, various medical imaging modalities/systems, and electrical safety.	UG	LE	Lecture
Spring 2008	BME462L	462L	Bioinstrumentation II Lab	BME	Biomedical Engineering	0	Required laboratory for BME 462.	UG	LB	Lab
Spring 2008	BME463	463	Biomedical Computers I	BME	Biomedical Engineering	2	Digital computer applications in biomedical related fields. Use of software to solve biomedical problems and display the results.	UG	LE	Lecture

Spring 2008	BME463L	463L	Biomedical Computers Lab	BME	Biomedical Engineering	0	Required laboratory for BME 463.	UG	LB	Lab
Spring 2008	BME464	464	Microprocessors for BME	BME	Biomedical Engineering	4	Principles, hardware structure, and programming techniques of microprocessors. Applications of microprocessor-based systems in hospitals, rehabilitation engineering, and medical research.	UG	LE	Lecture
Spring 2008	BME464L	464L	Microprocessors BME Lab	BME	Biomedical Engineering	0	Required laboratory for BME 464.	UG	LB	Lab
Spring 2008	BME470	470	Photon Radiation	BME	Biomedical Engineering	4	Basic introduction to generation, effects, and detection of ionizing radiation and its application to medicine. Successful completion of this course entitles students to be registered users of radioactive isotopes.	UG	LE	Lecture
Spring 2008	BME471	471	Medical Imaging	BME	Biomedical Engineering	4	Overview of the various methods used in generating images in medicine. Basic principles of the image-forming process and the physical properties of the resultant image are discussed.	UG	LE	Lecture

Spring 2008	BME485	485	Six Sigma for Engineers	BME	Biomedical Engineering	4	The course introduces students to the practical application of Six Sigma tools in manufacturing and service projects. The course also includes videotapes and case studies of real-world industrial operations.	UG	LE	Lecture
Spring 2008	BME491	491	BME Design I	BME	Biomedical Engineering	3	Individualized design projects allowing students to make use of design and analytical skills.	UG	LE	Lecture
Spring 2008	BME491W	491W	Writing in BME 491	BME	Biomedical Engineering	0	Required writing component for BME 491.	UG	LB	Lab
Spring 2008	BME492	492	BME Design II	BME	Biomedical Engineering	1	Individualized design projects allowing students to use design and analytical skills.	UG	LE	Lecture
Spring 2008	BME492W	492W	Writing in BME 492	BME	Biomedical Engineering	0		UG	LB	Lab
Spring 2008	BME493	493	BME Design III	BME	Biomedical Engineering	1	Individualized design projects allowing students to use design and analytical skills.	UG	LE	Lecture
Spring 2008	BME493W	493W	Writing in BME 493	BME	Biomedical Engineering	0		UG	LB	Lab
Spring 2008	BME499	499	Special Problems in BME	BME	Biomedical Engineering	1	Special problems in advanced engineering topics. Topics vary.	UG	LE	Lecture

Spring 2008	BME601	601	Egr Academic Integrity	BME	Biomedical Engineering	1	Introduce new engineering graduate students to ethics of engineering, scientific research, and technical writing. Additional topics include active reading, active listening, effective presentation, faculty-advisor relationships and the thesis/dissertation process.	GR	LE	Lecture
Spring 2008	BME619	619	Biofluid Mechanics	BME	Biomedical Engineering	3	Derivation and use of the basic conservation laws underlying the fluid mechanical behavior of the cardiopulmonary system. Includes applications to the flows of blood, pulmonary air, and extracorporeal fluids.	GR	LE	Lecture
Spring 2008	BME620	620	BME Heat & Mass Transfer	BME	Biomedical Engineering	3	Introduces transport phenomena in biomedical engineering and physiological systems. Energy and mass balances together with constitutive and empirical relationships are used in quantifying such topics as body heat loss by various modes, diffusion mass transport and heat/mass transport in applicable technological systems.	GR	LE	Lecture

Spring 2008	BME622	622	Engineering Biophysics	BME	Biomedical Engineering	4	Application of mathematical and engineering techniques toward describing biophysical systems. Topics include cellular transport, electrical properties of membranes, and biophysics of muscle contraction.	GR	LE	Lecture
Spring 2008	BME628	628	BIOMECH & BIOENERG	BME	Biomedical Engineering	5	Application of solid mechanics (statics/dynamics) toward the description and analysis of physiological systems. Topics include mechanics of the musculoskeletal system, human motion and collision, introductory material mechanics, human heat generation, transfer and measurement.	GR	LE	Lecture
Spring 2008	BME639	639	Biotransp & Artif Organ	BME	Biomedical Engineering	4	Introduction to transport processes vital to the design of medical devices for artificial intervention into living systems. Topics include circulatory system dynamics, mathematical modeling of physiological systems, membrane transport and biological/artificial organ design.	GR	LE	Lecture
Spring 2008	BME639L	639L	Biotrans Art Org Lab	BME	Biomedical Engineering	0	Required laboratory for BME 639.	GR	LB	Lab

Spring 2008	BME640	640	Biomaterials	BME	Biomedical Engineering	4	Application of properties of materials and solid mechanics to problems and design of medical implants, external prostheses, and living tissues. Topics include mechanical properties of biologic and synthetic materials, stress-strain analysis, viscoelasticity, tissue response to implants and vice versa, and implant materials for interfacing with hard and soft tissues and blood.	GR	LE	Lecture
Spring 2008	BME640L	640L	Biomaterials Lab	BME	Biomedical Engineering	0	Required laboratory for BME 640.	GR	LB	Lab
Spring 2008	BME660	660	Biomedical Electronics	BME	Biomedical Engineering	5	Employment of modern electronic devices and circuits as applied to instrumentation and data collection associated with biomedical applications and related fields. The course includes a bio-electronic laboratory component, which emphasizes a hands-on active learning.	GR	LE	Lecture
Spring 2008	BME660L	660L	Biomedical Electronics Lab	BME	Biomedical Engineering	0	Required laboratory for BME 660.	GR	LB	Lab

Spring 2008	BME661	661	Bioinstrumentation I	BME	Biomedical Engineering	4	Principles of design and analysis of electronic instrumentation for medical applications. Topics include various electrodes/transducers for physiological measurement and electrical stimulation, biological signal acquisition and processing, various medical imaging modalities/systems, and electrical safety. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	BME661L	661L	Bioinstrumentation I Lab	BME	Biomedical Engineering	0	Required laboratory for BME 661.	GR	LB	Lab
Spring 2008	BME662	662	Bioinstrumentation II	BME	Biomedical Engineering	4	Continuation of principles of design and analysis of electronic instrumentation for medical applications. Topics include various electrodes/transducers for physiological measurement and electrical stimulation, biological signal acquisition and processing, various medical imaging modalities/systems, and electrical safety. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	BME662L	662L	Bioinstrumentation II Lab	BME	Biomedical Engineering	0	Required laboratory for BME 662.	GR	LB	Lab

Spring 2008	BME663	663	Biomedical Computers I	BME	Biomedical Engineering	2	Digital computer applications in biomedical related fields. Use of software to solve biomedical problems and display results.	GR	LE	Lecture
Spring 2008	BME663L	663L	Biomed Computers I Lab	BME	Biomedical Engineering	0	Required laboratory for BME 663.	GR	LB	Lab
Spring 2008	BME664	664	Microprocessors for BME	BME	Biomedical Engineering	4	Examines principles, hardware structure, and programming techniques of microprocessors, applications of microprocessor-based systems in hospitals, rehabilitation engineering and medical research.	GR	LE	Lecture
Spring 2008	BME664L	664L	Microprocessors BME Lab	BME	Biomedical Engineering	0	Required laboratory for BME 664.	GR	LB	Lab
Spring 2008	BME670	670	Photon Radiation	BME	Biomedical Engineering	4	Introduces generation, effects, and detection of ionizing radiation and its application to medicine. Completion of this course fulfills the educational requirement to be a user of radioactive materials and radiation-producing devices.	GR	LE	Lecture
Spring 2008	BME671	671	Medical Imaging	BME	Biomedical Engineering	4	An overview is given over the various methods used in generating images in medicine. The basic principles of the image forming process are discussed as well as the physical properties of the resultant image.	GR	LE	Lecture

Spring 2008	BME685	685	Six Sigma for Engineers	BME	Biomedical Engineering	4	The course introduces students to the practical application of Six Sigma tools in the manufacturing and service projects. The course also includes video tapes and case studies of real world industrial operations.	GR	LE	Lecture
Spring 2008	BME699	699	Special Problems in BME	BME	Biomedical Engineering	1	Special problems in advanced engineering topics. Titles vary.	GR	LE	Lecture
Spring 2008	BME710	710	Ergonomic Engineering	BME	Biomedical Engineering	4	Advanced applications from a variety of bioengineering subfields are identified and defined with respect to their importance in the practice of human factors engineering.	GR	LE	Lecture
Spring 2008	BME711	711	Advanced Biomechanics	BME	Biomedical Engineering	3	Covers a variety of mathematical models that have been developed to describe muscle performance in health and disease.	GR	LE	Lecture
Spring 2008	BME712	712	Cardiopulmonary Modeling	BME	Biomedical Engineering	3	(Also listed as BMS 951.) Acquaints students with the analytical, numerical, and experimental methods used in modeling the quantitative behavior of physiological and artificial organ systems, particularly the circulation and the lungs.	GR	LE	Lecture

Spring 2008	BME713	713	Biocomptbly of Materials	BME	Biomedical Engineering	3	(Also listed as BMS 952.) Acquaints students with the concept of biocompatibility of materials, including effects on biological systems. Also deals with the general problem of selection, qualification, and specification of materials.	GR	LE	Lecture
Spring 2008	BME715	715	Molec Cell & Tissue Biom	BME	Biomedical Engineering	4	Biomechanical behavior of biological tissues over a range of length scales. Topics: structure of tissues, molecular basis of properties; chemical and electrical effects on biomechanics. Methods for investigating these properties will also be discussed.	GR	LE	Lecture
Spring 2008	BME725	725	Quant. Workload Analysis	BME	Biomedical Engineering	4	Physiological and mathematical methods needed to accomplish a workload analysis as requisite to a system design or a redesign of an ergonomic system.	GR	LE	Lecture
Spring 2008	BME731	731	Medical Ultrasonics	BME	Biomedical Engineering	4	(Also listed as BMS 956.) Fundamentals of medical ultrasonics: ultrasound generation, propagation, scattering, and attenuation in biological tissue. A-mode, B-mode, M-mode, and Doppler imaging techniques. Ultrasound tissue characterization and quantitative imaging techniques.	GR	LE	Lecture

Spring 2008	BME732	732	Computed Tomography	BME	Biomedical Engineering	4	(Also listed as BMS 957.) Principles of generating images from projections. Discussion of the various scanner geometries, mathematical reconstruction, correction procedures, and qualitative and quantitative evaluation of images. Focuses on the medical application of computed tomography.	GR	LE	Lecture
Spring 2008	BME733	733	Med Nucl Magnetic Res	BME	Biomedical Engineering	3	(Also listed as BMS 958.) Principles of imaging and spectroscopy of nuclear magnetic resonance in their applications to medicine. Topics include magnetization models, material encoding, spin interactions, localized spectroscopy, and relaxation.	GR	LE	Lecture
Spring 2008	BME734	734	Medical Imaging Processing	BME	Biomedical Engineering	4	(Also listed as BMS 959.) Digital image processing in its application to medical images. Topics include image display, filtering, two-dimensional Fourier transform, restoration, enhancement, and edge detection. Some simple tools from the field of mathematical morphology are also introduced.	GR	LE	Lecture

Spring 2008	BME735	735	Photon Emission Imaging	BME	Biomedical Engineering	3	(Also listed as BMS 960.) Principles of imaging procedures based on radioactive isotopes. Topics include radioactive isotopes, single-photon emission-tomography, and positron emission-tomography. Each topic covers instrumentation, image production, and major applications.	GR	LE	Lecture
Spring 2008	BME736	736	Biomed Signal & Prscng	BME	Biomedical Engineering	4	Characteristics and measurement of various biomedical signals; time-domain and frequency-domain, continuous and discrete signal representations; application of digital and random signal processing methods to analysis of biomedical signals.	GR	LE	Lecture
Spring 2008	BME737	737	Instr for Radiaition Meas	BME	Biomedical Engineering	4	Theoretical and practical consideration of radiation detectors and associated instrumentation, with focus on measurement of Gamma Radiation in diagnostic energy range. Identification on metrics used to characterize system performance; quality assurance of imaging components.	GR	LE	Lecture

Spring 2008	BME740	740	Rehab Egr Design I	BME	Biomedical Engineering	1	Presented as a three-quarter sequence to provide knowledge and experience in the rehabilitation engineering design process, research and development process, and funding issues. Limited to students enrolled in the graduate rehabilitation engineering training program.	GR	LE	Lecture
Spring 2008	BME741	741	Neuromuscular Engineering	BME	Biomedical Engineering	4	(Also listed as BMS 961.) Teaches the design and application of neuromuscular assistive devices. Emphasizes biomathematics modeling and control theory.	GR	LE	Lecture
Spring 2008	BME742	742	Rehab Assistive Systems	BME	Biomedical Engineering	4	(Also listed as BMS 962.) Design and application of devices used in rehabilitation. Provides an understanding of the problems of disabled people and the variety of possible solutions to these problems.	GR	LE	Lecture
Spring 2008	BME743	743	Intro Rehab Egr	BME	Biomedical Engineering	3	Introduces the complex structure of the rehabilitation engineering service delivery systems practiced in the United States. Covers basic disability areas, current laws, resources, and rehabilitation technology.	GR	LE	Lecture

Spring 2008	BME744	744	Kaizen/Lean Manufact Egr	BME	Biomedical Engineering	4	The course introduces students to the practical application of Lean manufacturing and Kaizen techniques in the manufacturing environment. It also includes case studies and team projects of real world problems and solutions.	GR	LE	Lecture
Spring 2008	BME745	745	Rehab Egr Service Deliver	BME	Biomedical Engineering	3	Introduces rehabilitation engineering design principles. Includes practical design experiences in worksite modification, ergonomics, and accessibility evaluations. Provides experience in technical report writing and presentation.	GR	LE	Lecture
Spring 2008	BME746	746	Rehab Egr Computers I	BME	Biomedical Engineering	4	Introduces object oriented programming structured around the HyperCard, HyperText Macintosh, and ToolBook PC environments. Covers basic principles of programming using objects, cards, windows, projects, and graphics with application to rehabilitation engineering. Introduces PC hardware in detail. Concurrent enrollment in lecture and lab is required.	GR	LE	Lecture
Spring 2008	BME746L	746L	Rehab Egr Comptr I Lab	BME	Biomedical Engineering	0	Required laboratory for BME 746.	GR	LB	Lab

Spring 2008	BME747	747	Rehab Egr Design II	BME	Biomedical Engineering	3	Continuation of BME 745 and BME 746. Focuses on development of computer application programs and devices to aid the disabled.	GR	LE	Lecture
Spring 2008	BME748	748	Intro to Clinical Prac	BME	Biomedical Engineering	4	Introduces clinical practices and services provided to disabled patients in a rehabilitation center involving various services, testing, and evaluation. Focus is on spinal cord injury and traumatic brain injury.	GR	LE	Lecture
Spring 2008	BME749	749	Ergonomics Biodynamics	BME	Biomedical Engineering	4	Covers quantitative assessment of human motions. Mathematical descriptions include anthropometry, kinematics, kinetics and energetics. The methods of kinesiology, biomechanical modeling and electromyography are emphasized.	GR	LE	Lecture
Spring 2008	BME750	750	Rehabilitation Engr	BME	Biomedical Engineering	1	Engineering analysis and design are applied on rehabilitation tasks within a clinical setting. Provides training in rehabilitation engineering management of various disabilities. Enrollment in multiple sections is required.	GR	LE	Lecture

Spring 2008	BME751	751	Human Control Engineering	BME	Biomedical Engineering	4	Modeling, design and analysis of the physiological and cognitive performance of the human operator. Human-environmental interactions are characterized as biothermal control systems. Human-technological interactions are characterized as informative control systems.	GR	LE	Lecture
Spring 2008	BME763	763	NMR Spectro & Imaging	BME	Biomedical Engineering	4	Discusses the applications of NMR Spectroscopy to the study of tissue metabolism in Vivo. The fundamental theory of magnetic resonance imaging, with a survey of clinical applications, is also presented.	GR	LE	Lecture
Spring 2008	BME789	789	Continuing Registration	BME	Biomedical Engineering	1		GR	IS	Independent Study
Spring 2008	BME880	880	Select Topics Sys Egr	BME	Biomedical Engineering	1	Selected topics in current research and recent developments in systems theory and engineering.	GR	LE	Lecture
Spring 2008	BME890	890	Special Problems in BME	BME	Biomedical Engineering	1	Special problems in advanced biomedical engineering topics. Topics vary.	GR	LE	Lecture
Spring 2008	BME898	898	PhD Dissertation Research	BME	Biomedical Engineering	1	Research on the Ph.D. dissertation topic. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	BME899	899	Thesis	BME	Biomedical Engineering	1	Pass/unsatisfactory.	GR	IS	Independent Study

Spring 2008	BMS655	655	Advanced Linear Algebra	BMS	Biomedical Sciences	3	(Also listed as MTH 655.) Vector spaces and subspaces, basis and dimension, linear transformations and matrices, eigenvalues, eigenvectors, and inner product spaces.	GR	LE	Lecture
Spring 2008	BMS664	664	Computational Statistics	BMS	Biomedical Sciences	4	Bootstrapping is a computing - intensive method of data analysis by computing distributions. The method, including permutation tests can be easily adapted to many classical problems. Software used for the course includes SPLUS and Mathematica.	GR	LE	Lecture
Spring 2008	BMS674	674	Advanced Stat Methods	BMS	Biomedical Sciences	1	Practical, applied coverage of basic statistical principles and terminology, ANOVA, multiple and logistic regression, sample size issues and experimental design. Biomedical data examples, review of computer output and class exercises are provided.	GR	LE	Lecture
Spring 2008	BMS698	698	BMS Computer Science	BMS	Biomedical Sciences	4	Introduces programs such as SYMVU, CSMP, and ORTEP, which create plotted output. FORTRAN is also introduced. Problems and data used are from the life sciences. Graded pass/unsatisfactory. Enrollment in Biomedical Sciences Ph.D. program required.	GR	LE	Lecture
Spring 2008	BMS698L	698L	BMS Computer Science Lab	BMS	Biomedical Sciences	0	Required laboratory for BMS 698.	GR	LB	Lab

Spring 2008	BMS703	703	Research Ethics	BMS	Biomedical Sciences	1	(Also listed as BMB 703.) Research ethics emphasizes the evaluation of hypothetical ethical scenarios. Class discussion is based on integrating ethical policy and practices as they relate to research at Wright State. Graded pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	BMS705	705	Linear Systems I	BMS	Biomedical Sciences	4	(Also listed as EE 701 and EGR 701.) Signal representation, orthonormal bases, and generalized Fourier series. Description of linear, discrete, and continuous systems. Systems analysis via classical equations, convolution, and transform methods.	GR	LE	Lecture
Spring 2008	BMS706	706	Linear Systems II	BMS	Biomedical Sciences	3	(Also listed as EE 702.) State variable representations of continuous and discrete systems. Linear vector spaces and similarity transformations; eigen-analysis, time and transform domain solutions of linear state equations; controllability, observability, and stability of linear systems.	GR	LE	Lecture
Spring 2008	BMS708	708	Digital Signal Processing	BMS	Biomedical Sciences	4	(Also listed as EE 710) Data Acquisition and Quantization, Unitary Transforms, Circular Convolution, Hilber Transform, FIR/IIR Filter Design and Realization, Analysis of Finite=Precision Numerical Effects, Spectral Estimation Cepstrum Analysis.	GR	LE	Lecture

Spring 2008	BMS710	710	Control Systems I	BMS	Biomedical Sciences	3	(Also listed as EE 613.) Provides students with a general control background. Major topics include block diagrams and signal-flow graphs, electromechanical modeling including state variable representation, time response, root locus, and introduction to design.	GR	LE	Lecture
Spring 2008	BMS711	711	Control Systems I Laboratory	BMS	Biomedical Sciences	1	(Also listed as EE 614.) Applications and testing of control systems theory with electromechanical systems.	GR	LB	Lab
Spring 2008	BMS712	712	Control Systems II	BMS	Biomedical Sciences	3	(Also listed as EE 615.) Using Control Systems I background, course concentrates on controller design, in both the time and frequency domains, using NYquist, Bode, and root locus techniques.	GR	LE	Lecture
Spring 2008	BMS713	713	Control Systems II Lab	BMS	Biomedical Sciences	1	(Also listed as EE 616.) Application and testing of control systems theory with electromechanical systems.	GR	LB	Lab
Spring 2008	BMS726	726	Synthetic Polymer Chemistry	BMS	Biomedical Sciences	3	(Also listed as CHM 661.) Step-growth and chain-growth polymerization in homogeneous and heterogeneous media; properties of commercial polymers.	GR	LE	Lecture
Spring 2008	BMS733	733	Advanced Inorganic Chemistry I	BMS	Biomedical Sciences	3	(Also listed as CHM 720.) Study of the modern theories of valence, structural inorganic chemistry and the chemistry of nonmetals.	GR	LE	Lecture

Spring 2008	BMS734	734	Adv Inorganic Chemistry II	BMS	Biomedical Sciences	3	(Also listed as CHM 721.) Thorough examination of chemistry of the metals stressing transition elements, ligand field theory and mechanisms of inorganic reactions.	GR	LE	Lecture
Spring 2008	BMS736	736	Chemical Kinetics	BMS	Biomedical Sciences	3	(Also listed as CHM 751.) Characterization of simple kinetic systems, experimental methods, energy distributions in molecules, the transition state method, and chain reactions in solution.	GR	LE	Lecture
Spring 2008	BMS737	737	Chemical Thermodynamics	BMS	Biomedical Sciences	3	Fundamentals of chemical thermodynamics; first, second, and third laws; and application to solutions.	GR	LE	Lecture
Spring 2008	BMS738	738	Sel Topics Physical Chemistry	BMS	Biomedical Sciences	3	(Also listed as CHM 855.) Selected topics in the field of physical chemistry such as molecular spectroscopy, advanced molecular structure, magnetic resonance, X-rays, crystal structure, statistical mechanics, or precise physical-chemical measurements.	GR	LE	Lecture
Spring 2008	BMS740	740	Adv Bioanalytical Chemistry	BMS	Biomedical Sciences	3	An introduction to control systems using state variables and classical analysis. Closed loop system representation, block diagrams, time response, and frequency response are treated.	GR	LE	Lecture

Spring 2008	BMS741	741	Structural Cncpts Organic Chm	BMS	Biomedical Sciences	3	(Also listed as CHM 744) Study of molecular orbital theory, reactive species, theories of acids and bases, and an introduction to stereochemistry.	GR	LE	Lecture
Spring 2008	BMS742	742	Instrumentation	BMS	Biomedical Sciences	3	(Also listed as CHM 730) Introduction to the theory and practices of modern chemical instrumentation; elementary electronics, spectrophotometry, atomic absorption, electrochemical techniques, chromatography, and other instrumental techniques.	GR	LE	Lecture
Spring 2008	BMS750	750	Biochem & Molecular Biology I	BMS	Biomedical Sciences	4	(Also listed as BMB 750.) Survey course emphasizing an experimental and problem-solving approach to buffers, protein structure, enzymes, and carbohydrate and lipid metabolism.	GR	LE	Lecture
Spring 2008	BMS752	752	Biochem & Molecular Biology II	BMS	Biomedical Sciences	3	(Also listed as BMB 752.) Survey course emphasizing an experimental and problem-solving approach to amino acid metabolism, nucleic acid function, and hormones.	GR	LE	Lecture

Spring 2008	BMS753	753	Molecular Signalling/Cell Bio	BMS	Biomedical Sciences	4	(Also listed as BMB 753.) A molecular analysis of information transfer into and within cells. Topics include visual transduction, hormones, hormone receptors, second messengers, regulation of transcription, and oncogenes. Readings from current scientific literature.	GR	LE	Lecture
Spring 2008	BMS755	755	Cancer:Molecular Aspects	BMS	Biomedical Sciences	3	(Also listed as BMB 755) A profile of the general properties of transformed cells and an in-depth examination of the mechanisms of oncogenesis at the level of molecular genetics.	GR	LE	Lecture
Spring 2008	BMS760	760	Molecular Biology of Nucleus	BMS	Biomedical Sciences	4	(Also listed as BMB 760.) A literature-based course covering molecular events in the nucleus including DNA replication, repair, recombination, and transcription.	GR	LE	Lecture
Spring 2008	BMS762	762	Fund Prin Fourier Trnsfrm NMR	BMS	Biomedical Sciences	3	(Also listed as BMB 762/PHY 760.) Covers the fundamental theory of nuclear magnetic resonance spectroscopy with emphasis on pulse Fourier transform methods.	GR	LE	Lecture

Spring 2008	BMS763	763	Vivo NMR Spectro & Imaging	BMS	Biomedical Sciences	3	(Also listed as BMB 763.) Discusses the applications of NMR spectroscopy to the study of tissue metabolism in vivo. The fundamental theory of magnetic resonance imaging, with a survey of clinical applications, are also presented.	GR	LE	Lecture
Spring 2008	BMS764	764	NMR Tech Biomlclr Str & Dyn	BMS	Biomedical Sciences	3	(Also listed as BMB 764.) Describes the NMR methods used for the determination of biomolecular structure and dynamics. Emphasis on two-dimensional Fourier transform techniques.	GR	LE	Lecture
Spring 2008	BMS765	765	Comp Tools/Strategies in BMS	BMS	Biomedical Sciences	4	(Also listed as BMB 765) This is a survey course of modern computational tools and strategies used in sequence, 3-D structure and functional analysis of biomolecules. Students will gain hands on "laboratory" experience with key software and strategies.	GR	LE	Lecture
Spring 2008	BMS767	767	Enzymes	BMS	Biomedical Sciences	4	(Also listed as BMB 727.) Mechanism of enzyme catalysis, including such topics as structure, kinetics, energetics, allosterism, co-enzymes, and control of enzymes and multienzyme systems.	GR	LE	Lecture

Spring 2008	BMS768	768	Biochem of Peptide Hormones	BMS	Biomedical Sciences	3	(Also listed as BMB 729) Synthesis, secretion, degradation, structure assay, mechanism of action, and function of peptide hormones are presented. Emphasis is on insulin and other hormones (e.g. glucagon, somatotropin, somatostatin) involved in diabetes mellitus.	GR	LE	Lecture
Spring 2008	BMS769	769	Biochemistry of Membranes	BMS	Biomedical Sciences	4	(Also listed as BMB 731.) Examines the biochemistry of membranes and provides basic information on membrane composition and processes.	GR	LE	Lecture
Spring 2008	BMS770	770	Physical Biochemistry	BMS	Biomedical Sciences	4	(Also listed as BMB 740.) Structure-function analysis of biological macromolecules (particularly proteins and polynucleotides) based on chemical and physical properties.	GR	LE	Lecture
Spring 2008	BMS771	771	Safe Use of Radionuclides	BMS	Biomedical Sciences	2	(Also Bio 743) Principles of a, b, and g radiation and methodology of counting with application to physical and biological problems.	GR	LE	Lecture

Spring 2008	BMS775	775	Pathogenic Mechanisms	BMS	Biomedical Sciences	5	(Also listed as M&I 675.) Expands knowledge of basic microbiology by focusing on human-microbial pathogen interactions. The molecular basis of the pathogenic mechanisms will be emphasized. In addition, the student will gain a better appreciation and understanding of the complexities of interactions between microbes and their human hosts.	GR	LE	Lecture
Spring 2008	BMS776	776	Bioenergetics	BMS	Biomedical Sciences	1	Structure of energy-transducing membranes of mitochondria, chloroplasts, and bacteria. Emphasis on mechanisms of energy transduction, thermodynamics of oxidation-reduction reactions, biophysical spectroscopic methods, and structure and surface topography of membrane proteins.	GR	LE	Lecture
Spring 2008	BMS777	777	Gene Therapy	BMS	Biomedical Sciences	4	(Also listed as M&I 777.) Study of the molecular basis of gene therapy and the use of viral gene delivery systems for the treatment of human disease. Gene therapy strategies are contrasted with various diseases, including cancer and AIDS.	GR	LE	Lecture

Spring 2008	BMS778	778	Cell Biology	BMS	Biomedical Sciences	4	(Also listed as BIO 730.) Provides a survey of basic concepts that are most important for understanding how cells function.	GR	LE	Lecture
Spring 2008	BMS779	779	Molecular Genetics	BMS	Biomedical Sciences	3	(Also listed as BIO 734.) Study of the replication, organization, and function of nucleic acids with emphasis on the role of nucleic acids in protein synthesis.	GR	LE	Lecture
Spring 2008	BMS780	780	Human Genetics	BMS	Biomedical Sciences	4	(Also listed as BIO 626.) Nature of human genetic traits, methods of analysis of inheritance, principles of counseling, and therapy.	GR	LE	Lecture
Spring 2008	BMS785	785	Advanced Seminar in Genetics	BMS	Biomedical Sciences	2	Review of current literature in molecular or human genetics subjects. Presentation of reviews to other students.	GR	LE	Lecture
Spring 2008	BMS790	790	Recombinant DNA Methods	BMS	Biomedical Sciences	6	(Also listed as BIO 737 and M&I 737.) Microbial and molecular techniques for producing, cloning, and characterizing recombinant DNA molecules; laboratory exercises in gene manipulation to give an understanding of principles of genetic engineering. Graded pass/unsatisfactory.	GR	LE	Lecture

Spring 2008	BMS799	799	Human Parasitology	BMS	Biomedical Sciences	2	(Also listed as BIO 676.) Study of the medical aspects of parasitology such as pathology, symptomatology, diagnosis, and identification of parasites. Course content is divided into three major categories: human protozoology, helminthology, and arthropodology.	GR	LE	Lecture
Spring 2008	BMS802	802	Immunology & Basic Virology	BMS	Biomedical Sciences	5	(Also listed as M&I 726.) Fundamentals of immunobiology and basic virology. Emphasis on regulatory and cellular levels of host immune responses against microbial pathogens as well as mechanisms of immunopathology. Characteristics and molecular biology of virus pathogens.	GR	LE	Lecture
Spring 2008	BMS803	803	Pathogenic Microbiology	BMS	Biomedical Sciences	5	(Also listed as M&I 727.) Study of microorganisms that are pathogenic for humans and animals using the organ system approach. Emphasis on mechanisms of pathogenesis and host resistance. Includes a project segment devoted to the independent study of the mechanisms of pathogenesis in the host-parasite interactions of the infectious agents used.	GR	LE	Lecture

Spring 2008	BMS805	805	Intercellular Communication	BMS	Biomedical Sciences	4	(Also listed as M&I 770, PHA 740, P&B 776.) Introduces concepts of intercellular communication through an interdisciplinary presentation of immune and neuroendocrine system functions. Emphasizes the similarities between the systems and the multidisciplinary approaches used to study each.	GR	LE	Lecture
Spring 2008	BMS807	807	Basic Virology	BMS	Biomedical Sciences	3	(Also listed as M&I 731.) Introduction to the field of virology with emphasis on animal viruses. Studies the intrinsic properties of viruses and their interaction with cells; multiplication, disease production, genetics, and tumor induction.	GR	LE	Lecture
Spring 2008	BMS809	809	Viral Oncology Seminar	BMS	Biomedical Sciences	3	(Also listed as M&I 833.) Provides an understanding of the process involved in cell transformation by oncogenic viruses.	GR	LE	Lecture
Spring 2008	BMS812	812	Immunobiology	BMS	Biomedical Sciences	5	(Also listed as M&I 745.) Study of the biology of the immune system, interms of curent concepts of antibody formation and function. Acuired delayed and immediate hypersensitivity are studied with respect to immunological deficiencies, malignany, tolerance, graft rejection, infection and aquired resistance.	GR	LE	Lecture

Spring 2008	BMS813	813	Special Topics in Immunology	BMS	Biomedical Sciences	2	(Also listed as M&I 840.) Students select, present, and analyze information from the current literature in immunobiology.	GR	LE	Lecture
Spring 2008	BMS817	817	Biological Safety	BMS	Biomedical Sciences	2	The basic principles and practices of biosafety are examined. This course teaches the identification, handling and containment of potentially hazardous biological materials, including microorganisms and recombinant DNA.	GR	LE	Lecture
Spring 2008	BMS818	818	Infection and Immunity	BMS	Biomedical Sciences	3	Focuses on both beneficial and adverse lost responses to microbial and metazoan parasites. Effects of infection on immune function are stressed.	GR	LE	Lecture
Spring 2008	BMS834	834	Electron Microscopy Life Sci	BMS	Biomedical Sciences	6	(Also listed as BIO 740.) Introduction to theoretical and practical aspects of transmission electron microscopy. Emphasis on interpretation and evaluation of electron micrographs.	GR	LE	Lecture
Spring 2008	BMS835	835	Mammalian Cell Biology	BMS	Biomedical Sciences	4	(Also listed as BIO 720.) A comprehensive course addressing both the known and theoretical aspects of cellular organization and function.	GR	LE	Lecture
Spring 2008	BMS837	837	Human Gross Anatomy	BMS	Biomedical Sciences	9	(Also listed as ANT 711.) Lectures and dissection of human cadaver. Includes introductory embryology.	GR	LL	Lecture/Lab Combination

Spring 2008	BMS838	838	Human Microanatomy	BMS	Biomedical Sciences	8	(Also listed as ANT 721.) Detailed macroanatomy of human cells, tissues, and organ systems.	GR	LE	Lecture
Spring 2008	BMS839	839	Developmental Biology	BMS	Biomedical Sciences	5	(Also listed as BIO 603.) Describes underlying processes that initiate the development of tissue and whole organisms in plants and animals.	GR	LE	Lecture
Spring 2008	BMS840	840	Repro Anatomy/Physiology	BMS	Biomedical Sciences	3	Reproductive cycles and gametogenesis; intercourse and conception; events of pregnancy and parturition; contraception, sterility, and dysfunction.	GR	LE	Lecture
Spring 2008	BMS853	853	Ion Channels	BMS	Biomedical Sciences	4	(Also listed as P&B 722.) Explores the role of ion channels in a variety of cell types with an emphasis on both electrophysiological and biochemical methods for evaluation of channel function.	GR	LE	Lecture
Spring 2008	BMS856	856	Glial Cell Physiology	BMS	Biomedical Sciences	3	(Also listed as P&B 650.) Concepts of glial cell physiology based on the analysis of current primary literature. Topics include interaction between glia and other cell types and the role of glia in pathophysiology.	GR	LE	Lecture
Spring 2008	BMS860	860	General Endodrinology	BMS	Biomedical Sciences	3	(Also listed as P&B 771.) Survey of endocrinological mechanisms and their role in integration of body function.	GR	LE	Lecture

Spring 2008	BMS862	862	Human Physiology	BMS	Biomedical Sciences	5	(Also listed as P&B 610.) An overview of human/mammalian organ system physiology. Fundamental mechanisms and the experimental basis for current understanding are emphasized.	GR	LE	Lecture
Spring 2008	BMS863	863	Prin Biomedical Research	BMS	Biomedical Sciences	1	This course is appropriate for students who will be involved in biomedical research. This provides lecture and student interactive series designed to introduce students to the basics of biomedical research.	GR	LE	Lecture
Spring 2008	BMS865	865	Introduction Neurophysiology	BMS	Biomedical Sciences	4	(Also listed as P&B 642.) Physiological mechanisms that subserve the functions of the nervous system. Topics include the biophysics of neuronal information, intercellular communications, motor control, sensory systems, and development neurobiology.	GR	LE	Lecture
Spring 2008	BMS869	869	Quant Aspects Membrane Trans	BMS	Biomedical Sciences	3	(Also listed as P&B 669.) Employs a quantitative approach to the properties of solutes, water, bio-electrical phenomena, transport systems that move solutes across biological membranes, and the interactions of these solutes with membranes. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture

Spring 2008	BMS870	870	Physio & Pharm Vascular Cells	BMS	Biomedical Sciences	3	(Also listed as PHA 870 and P&B 870.) Study of physiological steady state and pharmacological properties of vascular cells-circulating erythrocytes, endothelial cells, and smooth muscle cells in particular-as a basis of pathologic aberrations and clinical disorders.	GR	LE	Lecture
Spring 2008	BMS872	872	Mechanisms of Cell Death	BMS	Biomedical Sciences	3	(Also listed as P&B 772/M&I 772.) Signalling and molecular mechanisms of apoptotic cell death and relationship to human diseases.	GR	LE	Lecture
Spring 2008	BMS874	874	Physiology of Disability	BMS	Biomedical Sciences	4	This course introduces the student to the physiological and anatomical basis of physical disabilities, including disorders or cognition, impaired mobility and sensory deprivation.	GR	LE	Lecture
Spring 2008	BMS876	876	Principles of Biokinetics	BMS	Biomedical Sciences	4	(Also listed as PTX 710) Introduction of the basic principles that govern the bio availability/activity of drugs and toxants in an organism with focus on humans.	GR	LE	Lecture
Spring 2008	BMS879	879	Molecular Pharmacology	BMS	Biomedical Sciences	4	(Also listed as PTX 879) In-depth treatment of the theoretical principles and practical approaches to experimental investigation of drug action at the membrane receptor level using text and articles from primary literature.	GR	LE	Lecture

Spring 2008	BMS880	880	General Pharmacology II	BMS	Biomedical Sciences	4	(Also listed as PHA 880.) Extends the principles and theoretical considerations learned in BMS 879 and applies them to the action of drugs on the cardiovascular, respiratory, endocrine, gastrointestinal, and genito-urinary systems. Emphasis on antibiotics, chemotherapy of infectious diseases, antineoplasia, and immuno-suppressants. An introduction to toxicology is provided. 879 and applies them to the action of drugs on the cardiovascular, respiratory, endocrine, gastrointestinal, and genito-urinary systems. Emphasis on antibiotics, chemotherapy of infectious diseases, antineoplasia, and immuno-suppressants. An introduction to toxicology is provided.	GR	LE	Lecture
Spring 2008	BMS881	881	Research Techniques	BMS	Biomedical Sciences	3	(Also listed as PTX 700) Practical laboratory experience in commonly used biological techniques including DNA purification and manipulation, protein expression and analysis, and the classical pharmacological technique of measuring receptor binding. Designed to give hands on experience along with a short weekly lecture providing background on the theory behind the topic.	GR	LE	Lecture

Spring 2008	BMS884	884	Toxicol Appl Chm Defense	BMS	Biomedical Sciences	3	(Also listed as PTX 770.) In-depth understanding of chemical and biological warfare threat agents and medical intervention. Requirements for government and contract research students for study design, development and execution.	GR	LE	Lecture
Spring 2008	BMS886	886	General Pathology	BMS	Biomedical Sciences	7	Introduces basic principles of abnormal biological processes in the human and subhuman vertebrate organisms. Deals with tissue injury and degeneration, abnormal growth, infection and host defense, selected metabolic and congenital disorders, and forensic problems. Complies with the Toxicology Society's recommended requirements for the professional toxicologist.	GR	LE	Lecture
Spring 2008	BMS887	887	Molecular Toxicology	BMS	Biomedical Sciences	4	(Also listed as PTX 751) Modern toxicology focuses on understanding the mechanism of action of chemicals of the molecular level. Exploration of a spectrum of molecular mechanisms of toxicity providing a broad perspective of the cutting edge toxicology research.	GR	LE	Lecture

Spring 2008	BMS888	888	General Toxicology II	BMS	Biomedical Sciences	4	(Also listed as PHA 752.) Introduction to general toxicology. Particular toxic agents are studied, including teratogens, mutagens, oncogens, heavy metals, and other environmental contaminants and toxins. Clinical, forensic, industrial, and agricultural toxicology are addressed along with regulations that apply to the field.	GR	LE	Lecture
Spring 2008	BMS889	889	Toxicologic Pathology	BMS	Biomedical Sciences	3	The pathobiology of toxic chemicals and materials is presented with emphasis placed on anatomic and physiologic changes produced in common laboratory animal species. Research methods enhancing the pathologic evaluation of biomedical specemens will be stressed.	GR	LE	Lecture
Spring 2008	BMS890	890	Principles of Biodynamics	BMS	Biomedical Sciences	4	(Also listed as PTX 750) Introduction of the basic principles that govern the dynamics of drugs and toxants in an organism with focus on humans.	GR	LE	Lecture
Spring 2008	BMS898	898	Neuropharmacology	BMS	Biomedical Sciences	3	(Also listed as PHA 898.) In-depth treatment of the anatomy, biochemistry, physiology, and function of neurotransmitter systems and the effects of drugs on the nervous system.	GR	LE	Lecture

Spring 2008	BMS899	899	Continuing Education	BMS	Biomedical Sciences	1		GR	LE	Lecture
Spring 2008	BMS902	902	Neurophysiology	BMS	Biomedical Sciences	3	(Also listed as P&B 720) Representation, processing and transmission of neuronal information; note of neuronal circuits in motor control and sensory systems.	GR	LE	Lecture
Spring 2008	BMS903	903	Human Neurobiology	BMS	Biomedical Sciences	7	(Also listed as ANT 731.) Detailed survey of the anatomy and physiology of the major fiber tracts and cell groups of the human central nervous system.	GR	LE	Lecture
Spring 2008	BMS905	905	Information Processing	BMS	Biomedical Sciences	4	(Also listed as PSY 665.) Experimental findings in animal and human memory with emphasis on their implications for current theories of memory.	GR	LE	Lecture
Spring 2008	BMS910	910	Adv Topics:Physiological Psy	BMS	Biomedical Sciences	4	(Also listed as PSY 619.) Detailed examination of selected areas in cognition and learning.	GR	LE	Lecture
Spring 2008	BMS914	914	Behavioral Neuroscience	BMS	Biomedical Sciences	4	(Also listed as PSY 891.) Covers neurobiological bases of behavior. Focuses on motor function, ingestion, mating, learning, memory, rhythmical influences, and emotion.	GR	LE	Lecture

Spring 2008	BMS925	925	Fund Bio Comp & Modeling	BMS	Biomedical Sciences	5	(Also listed as PHY 825) This course will treat fundamental programming approaches, data structures and mathematical/statistical principles used in designing computational biology tools and algorithms. Students will learn theoretical principles and gain practical experience.	GR	LE	Lecture
Spring 2008	BMS954	954	Quantitative Workload Analysis	BMS	Biomedical Sciences	4	(Also listed as HFE 725.) Provides students with tools required to accomplish a workload analysis as a requisite to a systems design or a redesign of an existing system.	GR	LE	Lecture
Spring 2008	BMS956	956	Medical Ultrasonics	BMS	Biomedical Sciences	4	(Also listed as BME 731.) Fundamentals of medical ultrasonics: ultrasound generation, propagation, scattering, and attenuation in biological tissue. A-mode, B-mode, M-mode, and Doppler imaging techniques. Ultrasound tissue characterization and quantitative imaging techniques.	GR	LE	Lecture

Spring 2008	BMS957	957	Computed Tomography	BMS	Biomedical Sciences	4	(Also listed as BME 732.) Principles of generating images from projections. Discussion of the various scanner geometries, mathematical reconstruction, correction procedures, and qualitative and quantitative evaluation of images. A major focus is the medical application of computed tomography.	GR	LE	Lecture
Spring 2008	BMS959	959	Processing of Medical Images	BMS	Biomedical Sciences	4	(Also listed as BME 734.) Digital image processing in its application to medical images. Topics include image display, filtering, two-dimensional Fourier transform, restoration, enhancement, and edge detection. Some simple tools from the field of mathematical morphology are also introduced.	GR	LE	Lecture
Spring 2008	BMS961	961	Neuromuscular Rehab Egr	BMS	Biomedical Sciences	4	(Also listed as BME 741.) Teaches the design and application of neuromuscular assistive devices. Biomathematics modeling and control theory are emphasized.	GR	LE	Lecture

Spring 2008	BMS964	964	Aerospace Med Human Factors	BMS	Biomedical Sciences	3	(Also listed as HFE 723.) Designed for BMS students who are residents of the Aerospace Medicine Program. Seminar focuses on recent developments in human factors engineering. Addresses design principles, crew compartment technology and resource management, crew members performance and reliability.	GR	LE	Lecture
Spring 2008	BMS967	967	Advanced Development Biology	BMS	Biomedical Sciences	4	(Also listed as BIO 703.) Molecular mechanism of development, including topics such as; cell signalling, pattern formation, terminal differentiation.	GR	LE	Lecture
Spring 2008	BMS990	990	Biomedical Sciences Seminar	BMS	Biomedical Sciences	1	(Also listed as P&B 808.) Convention of student body and faculty in biomedical sciences to learn, discuss, and critique the basic and clinical biomedical literature as presented by an active and reputable scientific investigator. Student presentations required.	GR	LE	Lecture
Spring 2008	BMS991	991	Special Topics	BMS	Biomedical Sciences	1	Selected topics in biomedical sciences.	GR	LE	Lecture
Spring 2008	BMS994	994	Introduction to Research	BMS	Biomedical Sciences	5	Introduces BMS students to the ongoing research activities within the nine program tracks; involves presentations by BMS faculty. Graded pass/unsatisfactory.	GR	LE	Lecture

Spring 2008	BMS995	995	Non-Dissertation Research	BMS	Biomedical Sciences	1	Supervised research other than laboratory rotations or dissertation research.Pass/unsatisfactory grades.	GR	LE	Lecture
Spring 2008	BMS996	996	Laboratory Rotation I	BMS	Biomedical Sciences	1	Independent study designed to develop proficiency in technology, instrumentation, research design, and data analysis in an area of concentration (advanced curriculum) different from a student's area of specialization.	GR	LB	Lab
Spring 2008	BMS997	997	Laboratory Rotation II	BMS	Biomedical Sciences	1	Independent study designed to develop proficiency in technology, instrumentation, research design, and data analysis in an area of concentration (advanced curriculum) different from a student's area of specialization.	GR	LB	Lab
Spring 2008	BMS998	998	Laboratory Rotation III	BMS	Biomedical Sciences	1	Independent study designed to develop proficiency in technology, instrumentation, research design, and data analysis in an area of concentration (advanced curriculum) different from a student's area of specialization.	GR	LB	Lab

Spring 2008	BMS999	999	Dissertation Research	BMS	Biomedical Sciences	1	Planning and execution of scholarly original research of a quality that is publishable in a referred, scientific journal. Research must be communicated to the supervisory committee in written form and defended by public, oral examination.	GR	LE	Lecture
Spring 2008	BUS100	100	Horizons in Business	BUS	Business	4	Covers the range of activities, challenges, opportunities, and career paths in the world of U.S. and global business. Includes an overview and introduction to such diverse areas as the economic setting, international business, the structure of business, management of American business, human resources, marketing, information systems, accounting, finance, and ethics in business.	UG	LE	Lecture
Spring 2008	BUS480	480	Spec Top in Business	BUS	Business	3		UG	LE	Lecture
Spring 2008	CEG210	210	PC Networking I	CEG	Computer Engineering	4	Introduction to PC networking hardware, concepts, and technologies. Focus is on LAN administration and hardware and software configuration using in class hands-on exercises. Internet resources, from the PC network perspective, are utilized.	UG	LE	Lecture

Spring 2008	CEG211	211	PC Networking II	CEG	Computer Engineering	4	Focuses on server installation, administration, multiple protocol intergration, systems maintenance, and trouble-shooting. Includes hands-on class and laboratory assignments.	UG	LE	Lecture
Spring 2008	CEG220	220	"C" Programming for Engr	CEG	Computer Engineering	4	Introduction to digital computers and computer programming with C language. Algorithms and techniques useful to engineers. Data representa-tion, debugging, and program verification. Programming assignments include complex arithmetic. CS and CEG majors may not take this course for credit.	UG	LE	Lecture
Spring 2008	CEG221	221	Adv "C" for Engineers	CEG	Computer Engineering	4	Study and usage of the C programming language beyond what is taught in the introductory course, CEG 220, in the solution of engineering oriented problems.	UG	LE	Lecture
Spring 2008	CEG233	233	Linux and Windows	CEG	Computer Engineering	4	Linux and Windows; GUI; files, directories, permissions; programs, processes; system calls, libraries; loading; dynamic linking; command line shells; scripting languages; regular expressions; clients and servers; Web browsers; secure shell, sftp; SSl/TSL; system administration.	UG	LE	Lecture
Spring 2008	CEG233L	233L	Linux and Windows Lab	CEG	Computer Engineering	0	Linux and Windows Lab	UG	LB	Lab

Spring 2008	CEG260	260	Digital Circuits	CEG	Computer Engineering	4	(Also listed as EE 260.) Topics include switching algebra and switching functions, logic design of combinational and sequential circuits using TTL, combinational logic design with MSI and LSI, busing, storage elements, and instrumentation. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CEG260L	260L	Digital Circuits Labs	CEG	Computer Engineering	0	Required laboratory for CEG 260.	UG	LB	Lab
Spring 2008	CEG305	305	Fundamental Expert System	CEG	Computer Engineering	4	Definitions of AI, discussion of the different technologies that comprise the field, introduction to the fundamental concepts and methodologies of expert systems, and hands-on experience developing small expert system applications. CS and CEG majors may not take this course for credit.	UG	LE	Lecture

Spring 2008	CEG320	320	Computer Organization	CEG	Computer Engineering	4	Terminology and understanding of functional organizations and sequential operation of a digital computer. Program structure, and machine and assembly language topics including addressing, stacks, argument passing, arithmetic operations, traps, and input/output. Macros, modularization, linkers, and debuggers are used. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CEG333	333	Introduction to Unix	CEG	Computer Engineering	2	Introduction to the use of UNIX and UNIX tools as a problem-solving environment. Emphasis on the shell, files and directories, editing files, user process management, compiling, and debugging.	UG	LE	Lecture
Spring 2008	CEG355	355	Design of Info Tech Sys	CEG	Computer Engineering	4	Introduction to the design of information systems compirsing modern technologies such as SQL database programming, networks, and distributed computing with CORBA, electronic and hypertext (HTML) documents, and multimedia.	UG	LE	Lecture

Spring 2008	CEG360	360	Digital System Design	CEG	Computer Engineering	4	(Also listed as EE 451.) Topics include flip-flops, registers, counters, programmable logic devices, memory devices, register-level design, and microcomputer system organization. Students must show competency in the design of digital systems. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CEG360L	360L	Digital System Design Lab	CEG	Computer Engineering	0	Required laboratory for CEG 360.	UG	LB	Lab
Spring 2008	CEG399	399	Selected Topics	CEG	Computer Engineering	1	Selected topics in computer engineering.	UG	LE	Lecture

Spring 2008	CEG402	402	Computer Networks	CEG	Computer Engineering	4	Survey of modern digital communications techniques. Focus on serial transmission over public communications channels. Topics include information content and coding, asynchronous and synchronous formats, concentrating and multiplexing, channel properties, modulation techniques, common carrier services, error sources and control, regulatory policies, and networks and their analyses. Students must design both hardware and software components of computer communications systems. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CEG402L	402L	Computer Networks Lab	CEG	Computer Engineering	0	Required laboratory for CEG 402.	UG	LB	Lab
Spring 2008	CEG403	403	Personal Area Networks	CEG	Computer Engineering	4	Introduction to Wireless Personal Area Networks (WPANs). Topics include the networking architectures, protocol design and development, resource management, middleware and agent technologies, safety, security and compatibility and performance analysis in WPANs.	UG	LE	Lecture

Spring 2008	CEG404	404	Wireless Sensor Networks	CEG	Computer Engineering	4	Introduction to wireless sensor networks, fundamental problems and their solutions. Focus on data aggregation, dissemination, localization, power management, security, algorithms and protocol. Students develop applications using Micaz motes & sensors running TinyOS operating system.	UG	LE	Lecture
Spring 2008	CEG411	411	Microproc System Design	CEG	Computer Engineering	4	Introduction to the design and development of software and computer-interfacing hardware for effective use of microprocessors in process control, data collecting, and other special-purpose computing systems. Software topics include assembly language programming, input/output, interrupts, direct memory access, and timing problems. For nonmajors only.	UG	LE	Lecture
Spring 2008	CEG411L	411L	Microproc System Des Lab	CEG	Computer Engineering	0	Required laboratory for CEG 411.	UG	LB	Lab

Spring 2008	CEG416	416	Matrix Computations	CEG	Computer Engineering	4	(Also listed as MTH 416.) Survey of numerical methods in linear algebra emphasizing practice with high-level computer tools. Topics include Gaussian elimination, LU decomposition, numerical eigenvalue problems, QR factorization, least squares, singular value decompositions, and iterative methods.	UG	LE	Lecture
Spring 2008	CEG419	419	Intro Fuzzy Logic Ctrl	CEG	Computer Engineering	4	(Also listed as EE 419.) Foundations and philosophy of fuzzy logic and applications to control theory. Relationship between classical PID control and fuzzy rule-based control. Techniques for rule construction and adaptive fuzzy logic controllers. Case studies of applications. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CEG419L	419L	Intro Fuzzy Log Ctrl Lab	CEG	Computer Engineering	0	Required laboratory for CEG 419.	UG	LB	Lab
Spring 2008	CEG420	420	Computer Architecture	CEG	Computer Engineering	4	Introduction to computer architecture, computer system analysis and design, performance and cost, instruction set architecture, processor implementation techniques, pipelining, memory-hierarchy design, input/output, and contemporary architectures.	UG	LE	Lecture

Spring 2008	CEG421	421	Microcomputer Design Proj	CEG	Computer Engineering	4	In-depth study of the design and use of microcomputer systems. Computer organization and interface facilities are examined. Hardware/software projects are required to develop techniques for hardware and software design of open-ended projects. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CEG421L	421L	Microcom Design Proj Lab	CEG	Computer Engineering	0	Required laboratory for CEG 421.	UG	LB	Lab
Spring 2008	CEG425	425	VHDL Hdwe Desc Lang	CEG	Computer Engineering	4	VHDL is an industry-standard language used to describe hardware from the abstract to the concrete level. VHDL is rapidly being embraced as the universal communication medium of design.	UG	LE	Lecture
Spring 2008	CEG428	428	Linear Optical Systems	CEG	Computer Engineering	4	Introduction to linear optical systems, transformation properties of optical systems, correlation, convolution, diffraction, applications related to optical computers, such as beam steering for optical interconnection and parallel optical algorithm for pattern search, and neural network.	UG	LE	Lecture
Spring 2008	CEG428L	428L	Linear Optical Sys Lab	CEG	Computer Engineering	0	Required laboratory for CEG 428.	UG	LB	Lab

Spring 2008	CEG429	429	Internet Security	CEG	Computer Engineering	4	Authentication, address spoofing, hijacking, SYN floods, smurfing, sniffing, routing tricks, and privacy of data en-route. Buffer overruns and other exploitations of software development errors. Hardening of operating systems. Intrusion detection. Firewalls. Ethics. Prerequisite: CEG 402. Must have senior standing or be a first year graduate student to enroll.	UG	LE	Lecture
Spring 2008	CEG433	433	Operating Systems	CEG	Computer Engineering	4	Overview of operating systems internals. File-system usage and design, process usage and control, virtual memory, multi user systems, access control. Course projects use C++ language. 4 Credit Hours. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CEG434	434	Concurrent Software Des	CEG	Computer Engineering	4	Continuation of CEG 433. Processes and semaphores. Classical problems and solutions of synchronization and concurrency. File system integrity and robustness. Paging and segmentation. Overview of device drivers. Design of OS internals.	UG	LE	Lecture

Spring 2008	CEG435	435	Distrib Computing & Sys	CEG	Computer Engineering	4	Study of process coordination, client-server computing, network and distributed operating systems, network and distributed file systems, concurrency control, recovery of distributed transactions, and fault-tolerant computing.	UG	LE	Lecture
Spring 2008	CEG436	436	Mobile Computing	CEG	Computer Engineering	4	Study networking protocol and system design in mobile computing. Focus on concepts, architecture, design, and performance evaluation of mobile computing principles, protocols and applications, including: wireless TCP, Mobile IP, 802.11, agent techniques, etc.	UG	LE	Lecture
Spring 2008	CEG453	453	Embedded Systems	CEG	Computer Engineering	4	Laboratory projects combine engineering hardware and computer-science software concepts in the design and implementation of small, special-purpose computer systems. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CEG453L	453L	Embedded Systems Laboratory	CEG	Computer Engineering	0	Required laboratory for CEG 453.	UG	LB	Lab

Spring 2008	CEG454	454	VLSI Design	CEG	Computer Engineering	4	(Also listed as EE 454.) Introduction to VLSI system design. Topics include CMOS devices and circuit design techniques, basic building blocks for CMOS design, fabrication processing and design rules, chip planning and layout, system timing and power dissipation, simulation for VLSI design, and signal processing with VLSI.	UG	LE	Lecture
Spring 2008	CEG454L	454L	VLSI Design Lab	CEG	Computer Engineering	0	Required laboratory for CEG 454.	UG	LB	Lab
Spring 2008	CEG456	456	Intro to Robotics	CEG	Computer Engineering	4	(Also listed as EE 456, ME 456.) An introduction to the mathematics, programming, and control of robots. Topics include coordinate systems and transformations, manipulator kinematics and inverse kinematics, trajectory planning, Jacobians, and control.	UG	LE	Lecture
Spring 2008	CEG456L	456L	Intro to Robotics Lab	CEG	Computer Engineering	0	Required laboratory for CEG 456.	UG	LB	Lab

Spring 2008	CEG458	458	Ckt Dsgn w PLDs & FPGAs	CEG	Computer Engineering	4	(Also listed as EE 458.) Design and application of digital integrated circuits using programmable logic devices (PLDs) and field programmable gate arrays (FPGAs). A commercial set of CAD tools (Mentor Graphics and Xilinx) will be used in the laboratory portion of the course.	UG	LE	Lecture
Spring 2008	CEG458L	458L	Ckt Des/PLDs & FPGAs Lab	CEG	Computer Engineering	0	Required laboratory for CEG 458.	UG	LB	Lab
Spring 2008	CEG459	459	Circuit Design with VHDL	CEG	Computer Engineering	4	(Also listed as EE 459.) Application of VHSIC hardware description language (VHDL) to the design, analysis, multi-level simulation, and synthesis of digital integrated circuits. A commercial set of CAD tools (Mentor Graphics) will be used in the laboratory portion of the course.	UG	LE	Lecture
Spring 2008	CEG459L	459L	Ckt Design with VHDL Lab	CEG	Computer Engineering	0	Required laboratory for CEG 459.	UG	LB	Lab

Spring 2008	CEG460	460	Intro to Software Engr	CEG	Computer Engineering	4	Concepts of software engineering. Analysis, design, and implementation of software engineering concepts that comprise structured programming and design. Case studies serve as examples illustrating the software life-cycle model. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CEG461	461	Obj-Oriented Prog&Design	CEG	Computer Engineering	4	Study of object-oriented design and programming. Programming topics emphasize the core concepts of encapsulation, inheritance, polymorphism, and dynamic binding. Additional topics include class organization, software maintenance, and design of reusable components.	UG	LE	Lecture
Spring 2008	CEG463	463	Pers Softw/Dev Process	CEG	Computer Engineering	4	Discusses software development as it relates to the individual, software process measurement, design and code reviews, software quality measurement, design, and design verification. Each student will participate in the development of a software project. Three hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	CEG465	465	Interactive Sys Modeling	CEG	Computer Engineering	4	(Also listed as HFE 465.) Provide students experience in interactive real-time simulation, design, implementation, and evaluation of interfaces to simulations. The relevant topics are explored through application in supervisory control of complex, dynamic systems.	UG	LE	Lecture
Spring 2008	CEG468	468	Managing Softw/Dev Proces	CEG	Computer Engineering	4	Discusses software development processes, models, and techniques necessary to successfully develop large-scale software. Presents the Capability Maturity Model (CMM). Each student will participate in the development of a software project. Three hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	CEG476	476	Computer Graphics	CEG	Computer Engineering	4	(Also listed as MTH 476.) Contents: raster graphics algorithms, geometric primitives and their attributes, clipping, anialiasing, geometric transformations, structures and hierarchical models, input devices, and interactive techniques. Students develop interrelated programs to design a three-dimensional hierarchical model, manipulate, and view it.	UG	LE	Lecture

Spring 2008	CEG477	477	Computer Graphics II	CEG	Computer Engineering	4	(Also listed as MTH 477.) Continuation of CEG 476. Covers surface rendering, midden line and surface removal, illumination models, texture and mapping, color models, geometric modeling, and graphical interface design. Students develop programs and a final project. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CEG478	478	Coding Theory	CEG	Computer Engineering	3	(Also listed as MTH 456, EE 478.) Introduction to the essentials of error-correcting codes and the study of methods for efficient and accurate transfer of information. Topics to be covered include basic concepts, perfect and related codes, cyclic codes, and BCH codes.	UG	LE	Lecture
Spring 2008	CEG479	479	Computer Animation	CEG	Computer Engineering	4	Covers transformations, interpolation, morphing, camera control, hierarchical kinematic modeling, rigid-body animation, controlling groups of objects, collision detection, image-based rendering. Students develop three programs and a final project relating to animation.	UG	LE	Lecture

Spring 2008	CEG490	490	Technology-Based Ventures	CEG	Computer Engineering	4	Train students on methods to develop breakthrough products with an entrepreneurial perspective and managerial outlook. Topics include advanced product development, protecting intellectual property, fostering strategic and creative thinking, effectively leading technology-driven teams.	UG	LE	Lecture
Spring 2008	CEG495	495	Undergraduate Thesis	CEG	Computer Engineering	4	Completion of a computer engineering research project. Writing and defending a thesis that describes the research and summarizes the results.	UG	IS	Independent Study
Spring 2008	CEG498	498	Team Projects	CEG	Computer Engineering	4	A summative computer engineering team design project building upon previous engineering, science, mathematics, and communication course work focusing on professional practice in computer science and engineering. Must enroll in two consecutive terms.	UG	LE	Lecture
Spring 2008	CEG499	499	Selected Topics	CEG	Computer Engineering	1	Topics vary. May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independent Study

Spring 2008	CEG505	505	Fundamental of Expert Sys	CEG	Computer Engineering	4	Covers definitions of AI, discusses the different technologies that comprise the field, introduces the fundamental concepts and methodologies of expert systems, and provides hands-on experience developing small expert system applications.	GR	LE	Lecture
Spring 2008	CEG520	520	Computer Organization	CEG	Computer Engineering	4	Terminology and understanding of functional organizations and sequential operation of a digital computer. Program structure, and machine and assembly language topics including addressing, stacks, argument passing, arithmetic operations, traps, and input/output. Macros, modularization, linkers, and debuggers are used. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	CEG560	560	Digital System Design	CEG	Computer Engineering	4	(Also listed as EE 651.) Topics include flip-flops, registers, counters, programmable logic devices, memory devices, register-level design, and microcomputer system organization. Students must show competency in the design of digital systems. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CEG560L	560L	Digital System Design Lab	CEG	Computer Engineering	0	Required laboratory for CEG 560.	GR	LB	Lab

Spring 2008	CEG602	602	Computer Networks	CEG	Computer Engineering	4	Survey of modern digital communications techniques. Specific focus is on serial transmission over public communication channels. Topics include information content and coding, asynchronous and synchronous formats, concentrating and multiplexing, channel properties, modulation techniques, common carrier services, error sources and control, regulatory policies, networks, and their analyses. Students design both hardware and software components of computer communications systems. 3 hours lecture, 2 hours lab. Knowledge of a higher-order language required.	GR	LE	Lecture
Spring 2008	CEG602L	602L	Computer Commun Des Lab	CEG	Computer Engineering	0	Required laboratory for CEG 602.	GR	LB	Lab
Spring 2008	CEG603	603	Personal Area Networks	CEG	Computer Engineering	4	Introduction of wireless Personal Area Networks (WPANs). Topics include the networking architectures, protocol design and development, resource management, middleware and agent technologies, safety, security and compatibility and performance analysis in WPANs.	GR	LE	Lecture

Spring 2008	CEG604	604	Wireless Sensor Networks	CEG	Computer Engineering	4	Introduction to wireless sensor networks. Overview of fundamental problems and their solutions. Focus on data aggregation, dissemination, localization, power management, security, algorithms and protocol. Students develop applications using Micaz motes and sensors running TinyOS operating systems.	GR	LE	Lecture
Spring 2008	CEG611	611	Microproc System Design	CEG	Computer Engineering	4	Introduces the design and development of software and computer interfacing hardware for effective use of microprocessors in process control, data collecting, and other special purpose computing systems. Software topics include assembly language programming, input/output, interrupts, direct memory access, and timing problems. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CEG611L	611L	Microproc Sys Desgn Lab	CEG	Computer Engineering	0	Required laboratory for CEG 611.	GR	LB	Lab

Spring 2008	CEG616	616	Matrix Computations	CEG	Computer Engineering	4	(Also listed as MTH 616.) Survey of numerical methods in linear algebra emphasizing practice with high-level computer tools. Topics include Gaussian elimination, LU decomposition, numerical eigenvalue problems, QR factorization, least squares, singular value decompositions, and iterative methods.	GR	LE	Lecture
Spring 2008	CEG619	619	Intro Fuzzy Logic Cntrl	CEG	Computer Engineering	4	(Also listed as EE 619.) Foundations and philosophy of fuzzy logic and applications to control theory. Relationship between classical PID control and fuzzy rule-based control. Techniques for rule construction and adaptive fuzzy logic controllers. Case studies of applications.	GR	LE	Lecture
Spring 2008	CEG619L	619L	Int Fuzzy Logic Cntl Lab	CEG	Computer Engineering	0	Required laboratory for CEG 619.	GR	LB	Lab
Spring 2008	CEG620	620	Computer Architecture	CEG	Computer Engineering	4	Introduction to Computer Architecture, computer system analysis and design, performance and cost, instruction set architecture, processor implementation techniques, pipelining, memory-hierarchy design, input/output and contemporary architectures.	GR	LE	Lecture

Spring 2008	CEG621	621	Microcomputer Design Proj	CEG	Computer Engineering	4	In-depth study of the design and use of microcomputer systems. The computer organization and interface facilities are examined. Hardware/software projects are required to develop techniques for hardware and software design of open-ended projects. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CEG621L	621L	Micro Computer Proj Lab	CEG	Computer Engineering	0	Required laboratory for CEG 621.	GR	LB	Lab
Spring 2008	CEG625	625	VHDL Hdwe Desc Lang	CEG	Computer Engineering	4	Rapidly being embraced as the universal communication medium of design, VHDL is an industry standard language used to describe hardware from the abstract to the concrete level.	GR	LE	Lecture
Spring 2008	CEG628	628	Linear Optical Systems	CEG	Computer Engineering	4	Introduction to linear optical systems, transformation properties of optical systems, correlation, convolution, diffraction, applications related to optical computers, such as beam steering for optical interconnection and parallel optical algorithm for pattern search, neural network.	GR	LE	Lecture

Spring 2008	CEG629	629	Internet Security	CEG	Computer Engineering	4	Authentication, address spoofing, hijacking, SYN floods, smurfing, sniffing, routing tricks, and privacy of data en-route. Buffer overruns and other exploitations of software development errors. Hardening of operating systems. Intrusion detection. Firewalls. Ethics.	GR	LE	Lecture
Spring 2008	CEG633	633	Operating Systems	CEG	Computer Engineering	4	Overview of Operating System internals. File-system usage and design, process usage and control, virtual memory, multi user systems, access control. Course projects use C++ language. 4 Credit Hours. Three house lecture, two hours lab.	GR	LE	Lecture
Spring 2008	CEG634	634	Concurrent Software Des	CEG	Computer Engineering	4	Continuation of CEG 633. Processes and semaphores. Classical problems and solutions of synchronization and concurrency. File system integrity and robustness. Paging and segmentation. Overview of device drivers. Design of OS internals.	GR	LE	Lecture
Spring 2008	CEG635	635	Distrib Computing & Sys	CEG	Computer Engineering	4	Covers issues such as process coordination, client-server computing, network and distributed operating systems, network and distributed file systems, concurrency control and recovery of distributed transactions, and fault-tolerant computing.	GR	LE	Lecture

Spring 2008	CEG636	636	Mobile Computing	CEG	Computer Engineering	4	Study networking protocol and system design in mobile computing. Focus on concepts, architecture, design, and performance evaluation of mobile computing principle, protocols and applications, including: wireless TCP, Mobile IP, 802.11 agent techniques, etc.	GR	LE	Lecture
Spring 2008	CEG653	653	Embedded Systems	CEG	Computer Engineering	4	Projects in the laboratory that combine engineering hardware and computer science software concepts in the design and implementation of small special-purpose computer systems. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CEG653L	653L	Embedded Systems Laboratory	CEG	Computer Engineering	0	Required laboratory for CEG 653.	GR	LB	Lab
Spring 2008	CEG654	654	VLSI Design	CEG	Computer Engineering	4	(Also listed as EE 654.) Introduction to VLSI system design. Topics include CMOS devices and circuit design techniques, basic building blocks for CMOS design, fabrication processing and design rules, chip planning and layout, system timing and power dissipation, simulation for VLSI design, and signal processing with VLSI.	GR	LE	Lecture
Spring 2008	CEG654L	654L	VLSI Design Lab	CEG	Computer Engineering	0	Required laboratory for CEG 654.	GR	LB	Lab

Spring 2008	CEG656	656	Intro to Robotics	CEG	Computer Engineering	4	(Also listed as EE 656 and ME 656.) Introduction to the mathematics, programming, and control of robots. Topics covered include coordinate systems and transformations, manipulator kinematics and inverse kinematics, trajectory planning, Jacobians, and control.	GR	LE	Lecture
Spring 2008	CEG656L	656L	Intro to Robotics Lab	CEG	Computer Engineering	0	Required laboratory for CEG 656.	GR	LB	Lab
Spring 2008	CEG658	658	Ckt Dsgn w PLDs & FPGAs	CEG	Computer Engineering	4	(Also listed as EE 658.) Design and application of digital integrated circuits using programmable logic devices (PLDs) and field programmable gate arrays (FPGAs). A commercial set of CAD tools (Mentor Graphics and Xilinx) will be used in the lab portion of the course.	GR	LE	Lecture
Spring 2008	CEG658L	658L	Ckt Des/PLDs & FPGAs Lab	CEG	Computer Engineering	0	Required laboratory for CEG 658.	GR	LB	Lab
Spring 2008	CEG659	659	Circuit Design with VHDL	CEG	Computer Engineering	4	(Also listed as EE 659.) Application of VHSIC hardware description language (VHDL) to the design, analysis, multi-level simulation, and synthesis of digital integrated circuits. A commercial set of CAD tools (Mentor Graphics) will be used in the lab portion of the course.	GR	LE	Lecture

Spring 2008	CEG659L	659L	Ckt Desgn with VHDL Lab	CEG	Computer Engineering	0	Required laboratory for CEG 659.	GR	LB	Lab
Spring 2008	CEG660	660	Intro to Software Engr	CEG	Computer Engineering	4	Concepts of software engineering including analysis, design, and implementation of software engineering concepts that comprise structured programming and design. Case studies serve as examples illustrating the software life-cycle model.	GR	LE	Lecture
Spring 2008	CEG661	661	Obj-Oriented Prog & Desig	CEG	Computer Engineering	4	Topics emphasize the core concepts of encapsulation, inheritance, polymorphism, and dynamic binding. Additional topics include class organization, software maintenance, and design of reusable components.	GR	LE	Lecture
Spring 2008	CEG663	663	Pers Softw/Dev Process	CEG	Computer Engineering	4	Discusses software development as it relates to the individual, software process measurement, design and code reviews, software quality measurement, design and design verification. Each student will participate in the development of a software project. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination

Spring 2008	CEG665	665	Interactive Sys Modeling	CEG	Computer Engineering	4	(Also listed as HFE 665.) Provides experience in interactive real-time simulation and design, implementation and evaluation of interfaces to simulations. The relevant topics are explored through application in supervisory control of complex, dynamic systems.	GR	LE	Lecture
Spring 2008	CEG668	668	Managing Softw/Dev Proces	CEG	Computer Engineering	4	Discusses software development processes, models, and techniques necessary to successfully develop large-scale software and presents the Capability Maturity Model (CMM). Students will participate in the development of a software project. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	CEG676	676	Computer Graphics	CEG	Computer Engineering	4	Covers raster graphics algorithms, geometric primitives and their attributes, clipping, antialiasing, geometric transformations, structures and hierarchical models, input devices, and interactive techniques. Students develop interrelated programs to design a 3-D hierarchical model, manipulate, and view it.	GR	LE	Lecture

Spring 2008	CEG677	677	Computer Graphics II	CEG	Computer Engineering	4	Continuation of CEG 676. Covers surface rendering, hidden line and surface removal, illumination models, texture mapping, color models, advanced modeling, and interface design. Students develop programs and a final project.	GR	LE	Lecture
Spring 2008	CEG678	678	Coding Theory	CEG	Computer Engineering	3	(Also listed as MTH 656/EE 678.) Introduction to the essentials of error-correcting codes, the study of methods for efficient and accurate transfer of information. Topics include basic concepts, perfect and related codes, cyclic codes, and BCH codes.	GR	LE	Lecture
Spring 2008	CEG679	679	Computer Animation	CEG	Computer Engineering	4	Covers transformations, interpolation, morphing, camera control, hierarchical kinematic modeling, rigid-body animation, controlling groups of objects, collision detection, image-based rendering. Students develop three programs and a final project relating to animation.	GR	LE	Lecture

Spring 2008	CEG690	690	Technology-Based Ventures	CEG	Computer Engineering	4	Train students on methods to develop breakthrough products with an entrepreurial perspective and managerial outlook. Topics include advanced product development, protecting intellectual property, fostering strategic and creative thinking, effectively leading technology-driven teams.	GR	LE	Lecture
Spring 2008	CEG699	699	Selected Topics	CEG	Computer Engineering	1	Selected topics in computer engineering. Topics vary. May be taken for letter grade or pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	CEG700	700	Prin of Instruct in CEG	CEG	Computer Engineering	3	Survey of available instructional materials and discussions of educational theory and techniques leading to more effective instruction. For graduate teaching assistants only.	GR	LE	Lecture
Spring 2008	CEG702	702	Advanced Computer Networks	CEG	Computer Engineering	4	This course provides an in-depth examination of the fundamental concepts and principles in communications and computer networks. Topics include: queuing analysis, ATM, frame relay, performance analysis of routings, and flow and congestion controls.	GR	LE	Lecture

Spring 2008	CEG720	720	Computer Architecture	CEG	Computer Engineering	4	Review of sequential computer architecture and study of parallel computers. Topics include memory hierarchy, reduced instruction set computer, pipeline processing, multiprocessing, various parallel computers, interconnection networks, and fault-tolerant computing. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CEG724	724	Computer Vision I	CEG	Computer Engineering	4	Study of the image formation process, binary images, edge detection and image segmentation, representation of 2-D and 3-D shapes, image features, image matching, object recognition, texture analysis, line-drawing interpretation, and model-based vision.	GR	LE	Lecture
Spring 2008	CEG725	725	Computer Vision II	CEG	Computer Engineering	4	Study of: stereo vision; shape from shading and photometric stereo; shape from texture; motion analysis and optical flow; camera calibration; projective geometry; geometric invariance; dynamic vision; analysis of multispectral images; analysis of volumetric images.	GR	LE	Lecture
Spring 2008	CEG726	726	Pattern Recognition	CEG	Computer Engineering	4	Bayesian Decision Theory, unsupervised learning and clustering, structural pattern recognition, synatactic pattern recogntion.	GR	LE	Lecture

Spring 2008	CEG728	728	Intro Optical Computing	CEG	Computer Engineering	4	Introduction to optical computing algorithms and architecture, optical logic, optical computing modules, optical CPUs, memory, interconnection, and optical devices.	GR	LE	Lecture
Spring 2008	CEG729	729	Optical Computer Arch	CEG	Computer Engineering	4	Optics provides for new high-performance architectures including hardware and software methodologies. Optical architectures considered include: sequential, dataflow, cellular automatic, and neural networks.	GR	LE	Lecture
Spring 2008	CEG730	730	Distr Comp Principles	CEG	Computer Engineering	4	Communicating sequential processes, clients and servers, remote procedure calls, stub generation, weak and strong semaphones, split-binary semaphores, and distributed termination. Example languages: SR, Linda. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	CEG750	750	Microprocessors	CEG	Computer Engineering	4	Study of microprocessors and the use of microprocessors in digital systems. Fundamentals of microprocessor software, assembly-level programming for micro-processor applications, memory and interface considerations, and systems employing microprocessors. 3 hours lecture, 2 hours lab.	GR	LE	Lecture

Spring 2008	CEG750L	750L	Microprocessors Lab	CEG	Computer Engineering	0	Required laboratory for CEG 750.	GR	LB	Lab
Spring 2008	CEG751	751	Microprocessors II	CEG	Computer Engineering	4	Interaction of microprocessors and the outside world. Data acquisition and real-time control. Bus interfacing and direct memory access. Multiple processor environment and distributed processing. Small real-time operating systems. Project management. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CEG751L	751L	Microprocessors II Lab	CEG	Computer Engineering	0	Required laboratory for CEG 751.	GR	LB	Lab
Spring 2008	CEG752	752	VLSI Subsystem Design	CEG	Computer Engineering	4	(Also listed as EE 752.) CMOS VLSI subsystems including data path operators, counters, multipliers, memory elements, and programmable logic arrays. VLSI circuits for FIR and IIR filters. VLSI circuits for digital data exchange systems. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CEG752L	752L	VLSI Lab	CEG	Computer Engineering	0	Required laboratory for CEG 752.	GR	LB	Lab

Spring 2008	CEG753	753	VLSI Synthesis/Optimiz	CEG	Computer Engineering	4	(Also listed as EE 753.) VLSI architectural-level synthesis and optimization including data-path synthesis, control-units synthesis, scheduling, and resource sharing. Logic-level synthesis and optimization including two-level and multi-level combinational logic optimization, and sequential logic optimization. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CEG753L	753L	VLSI II Lab	CEG	Computer Engineering	0	Required laboratory for CEG 753.	GR	LB	Lab
Spring 2008	CEG754	754	VLSI Testing/Testability	CEG	Computer Engineering	4	(Also listed as EE 754.) Design for testability of VLSI circuits. Topics include importance of testing, conventional test methods, built-in test, CAD tools for evaluation testability, test pattern generators, and compressors.	GR	LE	Lecture
Spring 2008	CEG754L	754L	VLSI Test/Testability Lab	CEG	Computer Engineering	0	Required laboratory for CEG 754.	GR	LB	Lab
Spring 2008	CEG755	755	Low Power VLSI and SOC	CEG	Computer Engineering	4	Low power Very Large Scale Integrated Circuit (VLSI) and system level design with System on a Chip (SOC) integration and test between analog and digital cores.	GR	LE	Lecture

Spring 2008	CEG756	756	Robotics I	CEG	Computer Engineering	4	(Also listed as EE 756 and ME 756.) Detailed study of the dynamics and control of robotic systems and robot programming languages and systems. Material covered includes rigid-body dynamics; linear, nonlinear, adaptive, and force control of manipulators; and robot programming languages.	GR	LE	Lecture
Spring 2008	CEG756L	756L	Robotics Lab	CEG	Computer Engineering	0	Required laboratory for CEG 756.	GR	LB	Lab
Spring 2008	CEG757	757	Robotics II	CEG	Computer Engineering	4	An introduction to sensing, vision, and robot intelligence and task planning. Material covered includes sensors, low-level and higher level vision techniques, task planning including obstacle avoidance and artificial intelligence and expert systems as applied to robotic systems.	GR	LE	Lecture
Spring 2008	CEG757L	757L	Robotics II Lab	CEG	Computer Engineering	0	Required laboratory for CEG 757.	GR	LB	Lab

Spring 2008	CEG758	758	CMOS Analog IC Design	CEG	Computer Engineering	4	(Also listed as EE 758.) Introduction to techniques, limitations, and problems in the design of CMOS analog integrated circuits. Topics include CMOS analog circuit modeling and device characterization, analog CMOS subcircuits, CMOS amplifiers, comparators, CMOS Op Amps. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CEG758L	758L	CMOS Analog IC Desgn Lab	CEG	Computer Engineering	0	Required laboratory for CEG 758.	GR	LB	Lab
Spring 2008	CEG759	759	AI in Robotics	CEG	Computer Engineering	4	Introduction to robot intelligence and task planning. Material includes obstacle avoidance, robot planning, robotics computations, neural network computing, robot learning, and expert systems.	GR	LE	Lecture
Spring 2008	CEG760	760	Adv Software Engineering	CEG	Computer Engineering	4	Introduction to software engineering. Fundamentals of problem specification, program design, verification, and evaluation are explored. Students participate in team projects to apply the methods introduced.	GR	LE	Lecture

Spring 2008	CEG763	763	Formal Meth in Soft Engr	CEG	Computer Engineering	4	Introduction to formal methods in the specification, design, construction, and verification of software systems. Discrete mathematics and logic for software engineering. Formal specification and design methods; design specification languages.	GR	LE	Lecture
Spring 2008	CEG770	770	Computer Engineering Math	CEG	Computer Engineering	4	Introduction to computer arithmetic algorithms, systems theory, linear and nonlinear programming, and optimization theory for computer engineering applications. In addition to mathematical theory, appropriate engineering applications are presented.	GR	LE	Lecture
Spring 2008	CEG777	777	Geometric Modeling	CEG	Computer Engineering	4	Hermite, Bezier, B-spline, Non-uniform rational B-spline curves and surfaces, as well as model construction, manipulation, and editing techniques are covered.	GR	LE	Lecture
Spring 2008	CEG789	789	Continuing Registration	CEG	Computer Engineering	1	A student must be registered at the graduate level in the quarter in which the degree is granted, or in any quarter in which the program is affording some service, such as giving an examination, reading a thesis, or giving advise on the thesis after completion of all other requirements of coursework and research.	GR	IS	Independent Study

Spring 2008	CEG790	790	Selected Topics Comp Egr	CEG	Computer Engineering	4	Lectures on and study of selected topics in current research and recent developments in computer engineering. May be taken for letter grade or pass/unsatisfactory. Titles vary.	GR	LE	Lecture
Spring 2008	CEG795	795	Independent Study	CEG	Computer Engineering	1	Special problems in advanced computer engineering topics. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	CEG799	799	Thesis	CEG	Computer Engineering	1	Grade pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	CEG802	802	Emerging Networks	CEG	Computer Engineering	4	New networking technologies are constantly emerging. This course captures the latest development in advanced data communications and networking arenas.	GR	LE	Lecture
Spring 2008	CEG820	820	Computer Architecture II	CEG	Computer Engineering	4	Study of parallel architectures and parallel processing. Topics include multiprocessors, cache coherence, synchronization mechanisms, scalable architectures, and vectorization and parallelization.	GR	LE	Lecture

Spring 2008	CEG830	830	Distr Comp Systems	CEG	Computer Engineering	4	Example languages and packages: SR and PVM, file servers, semantics of file sharing, caches and replication, log-structured file systems, remote evaluation, process migration, mobile projects, checkpointing and rollback-recovery.	GR	LE	Lecture
Spring 2008	CEG860	860	Object-Oriented Prog	CEG	Computer Engineering	4	Course covers data abstraction, overloading, polymorphism, inheritance binding, delegation and prototypes, and languages such as C++, Ada 95, Eiffel, and Self from a software engineering point of view.	GR	LE	Lecture
Spring 2008	CEG890	890	Selected Topics	CEG	Computer Engineering	1	Selected topics in computer science and engineering.	GR	IS	Independent Study
Spring 2008	CEG891	891	PhD Seminar	CEG	Computer Engineering	1	Registration in the Ph.D. seminar is required of all students seeking the Ph.D. in computer science and engineering. Graded pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	CEG892	892	PHD Qualifying Exam	CEG	Computer Engineering	1	Examination that tests understanding of the fundamentals necessary to begin concentrated study in a chosen Ph.D. research area. Composed of written tests and an oral exam. Must be passed within two attempts. Graded pass/unsatisfactory.	GR	IS	Independent Study

Spring 2008	CEG894	894	Candidacy Exam	CEG	Computer Engineering	1	Examination that tests for depth and understanding in a chosen computer science and computer engineering research area. Includes a written proposal for a Ph.D. topic and an oral examination that is open to the public. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	CEG895	895	Independent Study	CEG	Computer Engineering	1	Independent study in a chosen area for Ph.D. research. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	CEG896	896	Dissertation Defense	CEG	Computer Engineering	1	Examination on the Ph.D. dissertation. The written dissertation is submitted and must be successfully defended in the oral exam conducted by the dissertation committee. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	CEG897	897	Residency Research	CEG	Computer Engineering	1	Research on the Ph.D. dissertation topic taken in residence. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	CEG898	898	Dissertation Research	CEG	Computer Engineering	1	Research on the Ph.D. dissertation topic not taken in residence. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	CHI101	101	Beginning Chinese	CHI	Chinese	4	Study of the vocabulary and structure of the Chinese language; practice in conversation, reading and writing.	UG	LE	Lecture
Spring 2008	CHI102	102	First-Year Chinese	CHI	Chinese	4	Study of the vocabulary and structure of the Chinese language; practice in conversation, reading and writing.	UG	LE	Lecture

Spring 2008	CHI103	103	First-Year Chinese	CHI	Chinese	4	Study of the vocabulary and structure of the Chinese language; practice in conversation, reading and writing.	UG	LE	Lecture
Spring 2008	CHI111	111	Essentials of Chinese	CHI	Chinese	4	Introduction to Chinese with emphasis on speaking the language.	UG	LE	Lecture
Spring 2008	CHI201	201	Second Year Chinese	CHI	Chinese	4	Grammer review, reading, and discussion of selected texts with practice in speaking and writing the language.	UG	LE	Lecture
Spring 2008	CHI202	202	Second Year Chinese	CHI	Chinese	4	Grammer review, reading, and discussion of selected texts with practice in speaking and writing the language.	UG	LE	Lecture
Spring 2008	CHI203	203	Second Year Chinese	CHI	Chinese	4	Grammer review, reading, and discussion of selected texts with practice in speaking and writing the language.	UG	LE	Lecture
Spring 2008	CHI311	311	Chinese Conversation	CHI	Chinese	4	This course will pursue a balance of the four basic language skills: Reading, writing, listening and speaking in Chinese with a focus on conversation.	UG	LE	Lecture
Spring 2008	CHI312	312	Chinese Conversation	CHI	Chinese	4	This course is a continuation of Chinese 311 pursuing a balance of the four basic language skills: reading, writing, listening and speaking in Chinese with a focus on conversation.	UG	LE	Lecture

Spring 2008	CHI313	313	Chinese Conversation	CHI	Chinese	4	This course will pursue a balance of the four basic language skills: Reading, writing, listening and speaking in Chinese with a focus on conversation.	UG	LE	Lecture
Spring 2008	CHM101	101	Intro to Chemistry	CHM	Chemistry	4.5	Historical approach to the fundamentals of chemistry: composition and structure, properties and transformations of matter. Three hours lecture, three hours lab.	UG	LE	Lecture
Spring 2008	CHM101	101	Intro to Chemistry	CHM	Chemistry	4.5	Historical approach to the fundamentals of chemistry: composition and structure, properties and transformations of matter. Three hours lecture, three hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	CHM101L	101L	Intro to Chemistry Lab	CHM	Chemistry	0	Required laboratory for CHM 101.	UG	LB	Lab
Spring 2008	CHM101R	101R	Intro to Chemistry Rec	CHM	Chemistry	0	Required recitation for CHM 101.	UG	RE	Recitation
Spring 2008	CHM102	102	Elem Organic Chm w/Applic	CHM	Chemistry	4.5	An elementary discussion of the structure of hydrocarbons, organic functional groups, and a few selected reactions. Three hours lecture, three hours lab.	UG	LE	Lecture
Spring 2008	CHM102	102	Elem Organic Chm w/Applic	CHM	Chemistry	4.5	An elementary discussion of the structure of hydrocarbons, organic functional groups, and a few selected reactions. Three hours lecture, three hours lab.	UG	LB	Lab

Spring 2008	CHM102	102	Elem Organic Chm w/Applic	CHM	Chemistry	4.5	An elementary discussion of the structure of hydrocarbons, organic functional groups, and a few selected reactions. Three hours lecture, three hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	CHM102L	102L	Elem Org Chm w/Appl Lab	CHM	Chemistry	0	Required laboratory for CHM 102.	UG	LB	Lab
Spring 2008	CHM102R	102R	Elem Org Chm w/Appl Rec	CHM	Chemistry	0	Required recitation for CHM 102.	UG	RE	Recitation
Spring 2008	CHM105	105	Chemistry: Living Things	CHM	Chemistry	4	Examination of the principles of covalent bonding, structures, and reactions of molecules important to living things, with attention to the technological, regulatory, and social complexities of problems related to them. Three hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	CHM105	105	Chemistry: Living Things	CHM	Chemistry	4	Examination of the principles of covalent bonding, structures, and reactions of molecules important to living things, with attention to the technological, regulatory, and social complexities of problems related to them. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CHM105L	105L	Chm: Living Things Lab	CHM	Chemistry	0	Required laboratory for CHM 105.	UG	LB	Lab

Spring 2008	CHM106	106	Chemistry: Materials	CHM	Chemistry	4	Examination of the bonding of metals and nonmetals to explain the nature of familiar materials of industrial importance. Attention to the risk/benefit implications of these materials and technologies for consumers. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CHM106L	106L	Chm: Materials Lab	CHM	Chemistry	0	Required laboratory for CHM 106.	UG	LB	Lab
Spring 2008	CHM107	107	Chemistry: Energy & Envir	CHM	Chemistry	4	Examination of gaseous and liquid states and thermochemistry as a basis for understanding air and water quality and fossil and nuclear fuels. Attention to the chemistry of the solar system. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CHM107L	107L	Chm: Energy & Envir Lab	CHM	Chemistry	0	Required laboratory for CHM 107.	UG	LB	Lab
Spring 2008	CHM107W	107W	Writing in Chem/Engry& Envir	CHM	Chemistry	0		UG	LB	Lab
Spring 2008	CHM121	121	General Chemistry 1	CHM	Chemistry	3	Structure and properties of atoms and molecules and the macroscopic consequences thereof. Three hours lecture, three hours lab, one hour recitation.	UG	LE	Lecture
Spring 2008	CHM121L	121L	Submicroscopic Chm Lab	CHM	Chemistry	0	Required laboratory for CHM 121.	UG	LB	Lab
Spring 2008	CHM121R	121R	Submicroscopic Chm Rec	CHM	Chemistry	0	Required recitation for CHM 121.	UG	RE	Recitation

Spring 2008	CHM122	122	General Chemistry 2	CHM	Chemistry	3	Physical and chemical behavior of large collections of atoms and molecules. Three hours lecture, three hours lab, one hour recitation.	UG	LE	Lecture
Spring 2008	CHM122L	122L	Macroscopic Chemistry Lab	CHM	Chemistry	0	Required laboratory for CHM 122.	UG	LB	Lab
Spring 2008	CHM122R	122R	Macroscopic Chemistry Rec	CHM	Chemistry	0	Required recitation for CHM 122.	UG	RE	Recitation
Spring 2008	CHM123	123	General Chemistry 3	CHM	Chemistry	3	Quantitative aspects of chemistry; emphasis on computational and experimental estimation of the composition of chemical systems. Three hours lecture, three hours lab, one hour recitation.	UG	LE	Lecture
Spring 2008	CHM123L	123L	Reaction Dynamics Lab	CHM	Chemistry	0	Required laboratory for CHM 123.	UG	LB	Lab
Spring 2008	CHM123R	123R	Reaction Dynamics Rec	CHM	Chemistry	0	Required recitation for CHM 123.	UG	RE	Recitation
Spring 2008	CHM125	125	General Chemistry Lab 1	CHM	Chemistry	2	Examination of the principles of General Chemistry 1 through experimentation.	UG	LB	Lab
Spring 2008	CHM125L	125L	Lab in CHM 125	CHM	Chemistry	0		UG	LB	Lab
Spring 2008	CHM126	126	General Chemistry Lab 2	CHM	Chemistry	2	Examination of the principles of General Chemistry 2 through experimentation.	UG	LB	Lab
Spring 2008	CHM127	127	General Chemistry Lab 3	CHM	Chemistry	2	Examination of the principles of General Chemistry 3 through experimentation.	UG	LB	Lab

Spring 2008	CHM191	191	Modern Gen Chm I:Organic	CHM	Chemistry	5	Organic chemistry with its applications is presented with fundamental chemical concepts introduced as they are necessary to explain the subject.	UG	LE	Lecture
Spring 2008	CHM191L	191L	Mod Gen Chm I: Org Lab	CHM	Chemistry	0	Required laboratory for CHM 191.	UG	LB	Lab
Spring 2008	CHM191R	191R	Mod Gen Chm I: Org Rec	CHM	Chemistry	0	Required recitation for CHM 191.	UG	RE	Recitation
Spring 2008	CHM192	192	Mod Gen Chm II: Material	CHM	Chemistry	5	Useful materials are presented from a chemical point of view with fundamental concepts introduced as needed.	UG	LE	Lecture
Spring 2008	CHM192L	192L	Mod Gen Chm II: Mat Lab	CHM	Chemistry	0	Required laboratory for CHM 192.	UG	LB	Lab
Spring 2008	CHM192R	192R	Mod Gen Chm II: Mat Rec	CHM	Chemistry	0	Required recitation for CHM 192.	UG	RE	Recitation
Spring 2008	CHM193	193	Mod Gen Chm III: Energy	CHM	Chemistry	5	The relationships between energy and matter are explored with fundamental chemical concepts introduced as needed.	UG	LE	Lecture
Spring 2008	CHM193L	193L	Mod Gen Chm III: Engy Lab	CHM	Chemistry	0	Required laboratory for CHM 193.	UG	LB	Lab
Spring 2008	CHM193R	193R	Mod Gen Chm III: Engy Rec	CHM	Chemistry	0	Required recitation for CHM 193.	UG	RE	Recitation
Spring 2008	CHM211	211	Organic Chemistry I	CHM	Chemistry	4	Principles, theories, and applications of the chemistry of carbon compounds. Three hours lecture, one hour recitation.	UG	LE	Lecture
Spring 2008	CHM211R	211R	Organic Chemistry I Rec	CHM	Chemistry	0	Required recitation for CHM 211.	UG	RE	Recitation

Spring 2008	CHM212	212	Organic Chemistry II	CHM	Chemistry	4	Principles, theories, and applications of the chemistry of carbon compounds. Three hours lecture, one hour recitation.	UG	LE	Lecture
Spring 2008	CHM212R	212R	Organic Chemistry II Rec	CHM	Chemistry	0	Required recitation for CHM 212.	UG	RE	Recitation
Spring 2008	CHM213	213	Organic Chemistry III	CHM	Chemistry	4	Principles, theories, and applications of the chemistry of carbon compounds. Three hours lecture, one hour recitation.	UG	LE	Lecture
Spring 2008	CHM213R	213R	Organic Chemistry III Rec	CHM	Chemistry	0	Required recitation for CHM 213.	UG	RE	Recitation
Spring 2008	CHM215	215	Organic Chemistry Lab I	CHM	Chemistry	2	Laboratory illustrations of CHM 211 lecture material and techniques of preparative organic chemistry.	UG	LB	Lab
Spring 2008	CHM216	216	Organic Chemistry Lab II	CHM	Chemistry	2	Laboratory illustrations of CHM 212 lecture material and techniques of preparative organic chemistry.	UG	LB	Lab
Spring 2008	CHM217	217	Organic Chemistry Lab III	CHM	Chemistry	2	Laboratory illustrations of CHM 213 lecture material and techniques of preparative organic chemistry.	UG	LB	Lab

Spring 2008	CHM245	245	Concepts in Chemistry I	CHM	Chemistry	4.5	An accelerated treatment of fundamental concepts and applications of chemistry for elementary education majors. Those concrete observable topics most appropriate for presentation to elementary and middle school students will be emphasized. Demonstrations and activities are used extensively. For elementary education majors. Integrated lecture/lab.	UG	LL	Lecture/Lab Combination
Spring 2008	CHM246	246	Concepts in Chemistry I	CHM	Chemistry	4.5	Fundamental concepts of chemistry for middle childhood science education majors emphasizing topics most appropriate for presentation to middle school students. Course includes a detailed study of heat energy.	UG	LL	Lecture/Lab Combination
Spring 2008	CHM301	301	Philosophy of Chem	CHM	Chemistry	3	An upper level course for non-science majors who wish to learn about chemistry from a philosophical and humanist viewpoint.	UG	LE	Lecture
Spring 2008	CHM302	302	Environmental Chem	CHM	Chemistry	4	(Also listed as CHM 502.) Water, air, and soil chemistry including pollutants added to these environments and how they interact to create environmental problems. Three hours lecture, three hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	CHM310	310	Issues in Science	CHM	Chemistry	3	(Also listed as BIO 310, PHY 310, MTH 310, and GL 310.) A writing-intensive course dealing with issues in science.	UG	LE	Lecture

Spring 2008	CHM312	312	Quantitative Analysis	CHM	Chemistry	3	Introduction to chemical methods of analysis covering traditional as well as modern techniques and equipment; emphasis on calculations and the interpretation of analytical data.	UG	LE	Lecture
Spring 2008	CHM314	314	Quantitative Analysis Lab	CHM	Chemistry	4.5	Experimental methods of analysis. Practical applications of lecture material presented in CHM 312.	UG	LB	Lab
Spring 2008	CHM346	346	Concepts in Chemistry II	CHM	Chemistry	4.5	Based on National Science Education Standards. Topics include: periodic table, chemical reactions, thermochemistry, organic and nuclear chemistry with everyday examples. Inquiry-based activities including historical and societal perspectives. For Middle Childhood Majors pursuing science concentration. Integrated lecture/lab.	UG	LL	Lecture/Lab Combination
Spring 2008	CHM361	361	Org Chem of Egr Materials	CHM	Chemistry	4	Molecular structure, stereochemistry, properties, and reactivities of selected organic substances of industrial importance, including fuels, lubricants, solvents, coatings, plastics, dyes, and naturally occurring engineering materials. Not open to students with credit for CHM 212.	UG	LE	Lecture

Spring 2008	CHM402	402	Adv Environ Chm & Analy	CHM	Chemistry	4	(Also listed as CHM 602.) Environmental sampling and analysis using instrumental techniques. Chemical fate prediction by measurement and examination of physical and chemical properties. Three hours lecture, three hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	CHM410	410	EnviornmentalChemI: Air	CHM	Chemistry	3.5	Study of the Earth's atmosphere including its normal composition and atmospheric reactions; emphasis on nature, causes, effects, detection, and abatement of various types of air pollution. Two hours lecture, three hours lab, or field project.	UG	LE	Lecture
Spring 2008	CHM410L	410L	Environ Chem I: Air Lab	CHM	Chemistry	0	Required laboratory for CHM 410.	UG	LB	Lab
Spring 2008	CHM411	411	Environ Chem II: Water	CHM	Chemistry	3.5	Study of the Earth's fresh and saline water including its normal composition and aquatic reactions; emphasis on nature, causes, effects, detection, and abatement of various types of water pollution. Two hours lecture, three hours lab or field project.	UG	LE	Lecture
Spring 2008	CHM411L	411L	Env Chem II: Water Lab	CHM	Chemistry	0	Required laboratory for CHM 411.	UG	LB	Lab

Spring 2008	CHM412	412	Env Chem II: Solids	CHM	Chemistry	3.5	A survey of the problems of solid wastes, pesticides, food additives, and radioactive materials including their chemical composition, effects, detection, disposal, and natural breakdown. Three hours lecture, one hour lab or field project.	UG	LE	Lecture
Spring 2008	CHM412L	412L	Env Chem III: Solids Lab	CHM	Chemistry	0	Required laboratory for CHM 412.	UG	LB	Lab
Spring 2008	CHM417	417	Applied Chemical Spectro	CHM	Chemistry	3	The practical applications of various spectrophotometral techniques (mass spectroscopy, infrared spectroscopy, ultraviolet spectroscopy, and nuclear magnetic resonance) are integrated for the elucidation of the structure of organic molecules. A problem-solving approach is used.	UG	LE	Lecture
Spring 2008	CHM419	419	Chem Lit & Comp	CHM	Chemistry	3	Literature searching of journals, handbooks, abstracts, and patents. Writing of literature reports, abstracts, papers, and reports. Three lectures.	UG	LE	Lecture
Spring 2008	CHM419W	419W	Writing in CHM 419	CHM	Chemistry	0		UG	LB	Lab
Spring 2008	CHM420	420	Inorganic Chem	CHM	Chemistry	3	Principles and concepts of inorganic chemistry including the periodic table, atomic structure, chemical bonding, coordination compounds, and an introduction to group theory.	UG	LE	Lecture

Spring 2008	CHM421	421	Inorganic Chemistry	CHM	Chemistry	3	Principles and concepts of inorganic chemistry including the periodic table, atomic structure, chemical bonding, coordination compounds, and an introduction to group theory.	UG	LE	Lecture
Spring 2008	CHM425	425	Adv Inorg Syn & Charact	CHM	Chemistry	3	Advanced synthesis and characterization of representative inorganic compounds.	UG	LE	Lecture
Spring 2008	CHM435	435	Instrumental Analysis	CHM	Chemistry	3	Introduction to the theory and practice of modern chemical instrumentation. Elementary electronics, spectrophotometry, atomic absorption, electro-chemical techniques, chromatography, and other instrumental techniques.	UG	LE	Lecture
Spring 2008	CHM436	436	Instrumental Analysis Lab	CHM	Chemistry	4.5	Introduction to experimental instrumental analysis. Practical experience in the operation of chemical instrumentation; emphasizes applications of material presented in CHM 435.	UG	LB	Lab
Spring 2008	CHM437	437	Electroanalytical Chem	CHM	Chemistry	3	Fundamental principles of electrochemistry and the application of electrochemical methods to chemistry and chemical analysis.	UG	LE	Lecture

Spring 2008	CHM440	440	Syn Medicinal Chem I	CHM	Chemistry	3	Covers various chemical aspects of drugs including synthetic design, mode of action, and uses of various pharmaceuticals. Topics include cardiovascular agents, antibiotics, anti-tumor agents, and central nervous system drugs.	UG	LE	Lecture
Spring 2008	CHM441	441	Syn Medicinal Chem II	CHM	Chemistry	3	Covers various chemical aspects of drugs including synthetic design, mode of action, and uses of various pharmaceuticals. Topics include cardiovascular agents, antibiotics, anti-tumor agents, and central nervous system drugs.	UG	LE	Lecture
Spring 2008	CHM443	443	Chem Toxicology I: Drugs	CHM	Chemistry	3	Study of the basic principles of chemical toxicology. Chemicals that have the greatest incidence of abuse are discussed in detail with regard to their chemical-biological interactions, symptomatology of toxicity, clinical chemistry tests, and treatment.	UG	LE	Lecture
Spring 2008	CHM444	444	Chem Toxicology II: Envir	CHM	Chemistry	3	Study of the basic principles of chemical toxicology. Chemicals that have the greatest incidence of abuse are discussed in detail with regard to their chemical-biological interactions, symptomatology of toxicity, clinical chemistry tests, and treatment.	UG	LE	Lecture

Spring 2008	CHM445	445	Adv Organ Syn & Charac	CHM	Chemistry	3	Advanced synthesis and identification of organic compounds. One hour lecture, four hours lab.	UG	LE	Lecture
Spring 2008	CHM445L	445L	Adv Org Syn &Charac Lab	CHM	Chemistry	0	Required laboratory for CHM 445.	UG	LB	Lab
Spring 2008	CHM451	451	Physical Chemistry	CHM	Chemistry	3	Theoretical aspects of chemistry including thermodynamics, chemical kinetics, molecular structure and spectra, and the structure of solids and liquids.	UG	LE	Lecture
Spring 2008	CHM452	452	Physical Chemistry	CHM	Chemistry	3	Theoretical aspects of chemistry including thermodynamics, chemical kinetics, molecular structure and spectra, and the structure of solids and liquids.	UG	LE	Lecture
Spring 2008	CHM453	453	Physical Chemistry	CHM	Chemistry	3	Theoretical aspects of chemistry including thermodynamics, chemical kinetics, molecular structure and spectra, and the structure of solids and liquids.	UG	LE	Lecture
Spring 2008	CHM456	456	Phys Chm-Nonchemists	CHM	Chemistry	4	An introduction for nonchemistry majors to the ideas of physical chemistry, including thermodynamics, properties of liquids and solids, solution properties, and kinetics. Intended for biologists, geologists, physicists, premedical students and others with an interest in physical chemistry.	UG	LE	Lecture
Spring 2008	CHM457	457	Physical Chm Lab I	CHM	Chemistry	3	Experimental methods of physical chemistry.	UG	LB	Lab

Spring 2008	CHM457W	457W	Writing in CHM 457	CHM	Chemistry	0		UG	LB	Lab
Spring 2008	CHM458	458	Physical Chemistry Lab II	CHM	Chemistry	3	Experimental methods of physical chemistry.	UG	LB	Lab
Spring 2008	CHM458W	458W	Writing in Phy Chem Lab II	CHM	Chemistry	0		UG	LB	Lab
Spring 2008	CHM461	461	Synthetic Polymer Chm	CHM	Chemistry	3	Step-growth and chain-growth polymerization in homogeneous and heterogeneous media; properties of commercial polymers.	UG	LE	Lecture
Spring 2008	CHM465	465	Physical Polymer Chm	CHM	Chemistry	3	Introduction to the structural and physical aspects of macromolecules; emphasis on the relationship of polymer structure to physical and mechanical properties.	UG	LE	Lecture
Spring 2008	CHM467	467	Physical Polymer Chm Lab	CHM	Chemistry	1	Laboratory illustrations of CHM 465 lecture material and techniques of polymer science.	UG	LB	Lab
Spring 2008	CHM468	468	Polymer Synthesis Lab	CHM	Chemistry	1	Laboratory illustrations of CHM 461 lecture material and techniques of polymer science.	UG	LB	Lab
Spring 2008	CHM469	469	Engineering Plastics	CHM	Chemistry	4	(Also listed as ME 489.) Properties and manufacturing processes of engineering plastics, and effects of these factors on plastics design. Illustrative laboratory projects are included. Two hours lecture, four hours lab.	UG	LE	Lecture
Spring 2008	CHM469L	469L	Engineering Plastics Lab	CHM	Chemistry	0	Required laboratory for CHM 469.	UG	LB	Lab

Spring 2008	CHM472	472	Chemical Crystallography	CHM	Chemistry	4	Methodology and techniques in the determination of crystal and molecular structures using single-crystal x-ray diffraction.	UG	LE	Lecture
Spring 2008	CHM479	479	Materials Corrosion	CHM	Chemistry	4	(Also listed as ME 479.) Survey of principles of corrosion processes with application to metallic and nonmetallic materials. Principles of electro-chemistry are included.	UG	LE	Lecture
Spring 2008	CHM488	488	Independent Reading	CHM	Chemistry	1		UG	IS	Independent Study
Spring 2008	CHM499	499	Special Prob in Chem	CHM	Chemistry	1		UG	LE	Lecture
Spring 2008	CHM502	502	Environmental Chem	CHM	Chemistry	4	Students study water, air, and soil chemistry, including pollutants added to these environments and how they interact to create environmental problems. 3 hours lecture, 3 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	CHM512	512	Quantitative Analysis	CHM	Chemistry	3	Introduction to chemical methods of analysis covering traditional as well as modern techniques and equipment; emphasis on calculations and interpretation of analytical data.	GR	LE	Lecture
Spring 2008	CHM514	514	Quantitative Analysis Lab	CHM	Chemistry	4.5	Experimental methods of analysis. Practical applications of the lecture material presented in CHM 512.	GR	LB	Lab

Spring 2008	CHM520	520	Adv Inorganic Chemistry I	CHM	Chemistry	3	Principles and concepts of inorganic chemistry, including the periodic table, atomic structure, bonding, coordination compounds, and an introduction to group theory.	GR	LE	Lecture
Spring 2008	CHM521	521	Inorganic Chemistry	CHM	Chemistry	3	A thorough examination of the chemistry of the metals stressing the transition elements, ligand field theory and mechanisms of inorganic reactions.	GR	LE	Lecture
Spring 2008	CHM525	525	Adv Inorg Syn & Charact	CHM	Chemistry	3	Advanced synthesis and characterization of representative inorganic compounds. 1 hour lecture, 4 hour lab.	GR	LE	Lecture
Spring 2008	CHM525L	525L	Adv Inorg Syn&Char Lab	CHM	Chemistry	0	Required laboratory for CHM 525.	GR	LB	Lab
Spring 2008	CHM535	535	Instrumental Analysis	CHM	Chemistry	3	Introduction to the theory and practice of modern chemical instrumentation. Topics include elementary electronics, spectrophotometry, atomic absorption, electrochemical techniques, chromatography, and other instrumental techniques.	GR	LE	Lecture
Spring 2008	CHM536	536	Instrumental Analysis Lab	CHM	Chemistry	4.5	Introduction to experimental instrumental analysis. Practical experience in the operation of chemical instrumentation; emphasizes applications of the material presented in CHM 535.	GR	LB	Lab

Spring 2008	CHM545	545	Adv Org Syn & Charact	CHM	Chemistry	3	Advanced synthesis and identification of organic compounds. 1 hour lecture, 4 hours lab.	GR	LE	Lecture
Spring 2008	CHM545L	545L	Adv Org Syn & Char Lab	CHM	Chemistry	0	Required laboratory for CHM 545.	GR	LB	Lab
Spring 2008	CHM551	551	Physical Chemistry	CHM	Chemistry	3	Theoretical aspects of chemistry including thermodynamics, chemical kinetics, molecular structure and spectra, and the structure of solids and liquids.	GR	LE	Lecture
Spring 2008	CHM552	552	Physical Chemistry	CHM	Chemistry	3	Theoretical aspects of chemistry including thermodynamics, chemical kinetics, molecular structure and spectra, and the structure of solids and liquids.	GR	LE	Lecture
Spring 2008	CHM553	553	Physical Chemistry	CHM	Chemistry	3	Theoretical aspects of chemistry including thermodynamics, chemical kinetics, molecular structure and spectra, and the structure of solids and liquids.	GR	LE	Lecture
Spring 2008	CHM556	556	Physical Chemistry	CHM	Chemistry	4	An introduction for nonchemistry majors to the ideas of physical chemistry, including thermodynamics, properties of liquids and solids, solution properties, and kinetics. Intended for biologists, geologists, physicists, premedical students and others with an interest in physical chemistry.	GR	LE	Lecture
Spring 2008	CHM557	557	Physical Chemistry Lab I	CHM	Chemistry	3	Experimental methods of physical chemistry.	GR	LB	Lab

Spring 2008	CHM558	558	Physical Chemistry Lab II	CHM	Chemistry	3	Experimental methods of physical chemistry.	GR	LB	Lab
Spring 2008	CHM561	561	Org Chem of Egr Mat	CHM	Chemistry	4	Molecular structure, stereochemistry, properties, and reactivities of selected organic substances of industrial importance including fuels, lubricants, solvents, coatings, plastics, dyes, and naturally occurring engineering materials.	GR	LE	Lecture
Spring 2008	CHM588	588	Independent Reading	CHM	Chemistry	1		GR	IS	Independent Study
Spring 2008	CHM599	599	Special Problems in Chem	CHM	Chemistry	1		GR	LE	Lecture
Spring 2008	CHM602	602	Adv Environ Chm & Analy	CHM	Chemistry	4	Environmental sampling and analysis using instrumental techniques. Chemical fate prediction by measurement and examination of physical and chemical properties. 3 hours lecture, 3 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	CHM610	610	Environmental Chem I: Air	CHM	Chemistry	3.5	A study of the earth's atmosphere including its normal composition and atmospheric reactions with emphasis on the nature, causes, effects, detection, and abatement of various types of air pollution. 2 lectures and lab or field project.	GR	LE	Lecture
Spring 2008	CHM610L	610L	Environ Chem I: Air Lab	CHM	Chemistry	0	Required laboratory for CHM 610.	GR	LB	Lab

Spring 2008	CHM611	611	Environment Chm II: Water	CHM	Chemistry	3.5	A study of the earth's fresh and saline water including its normal composition and aquatic reactions with emphasis on the nature, causes, effects, detection, and abatement of various types of water pollution. 2 lectures and lab or field project.	GR	LE	Lecture
Spring 2008	CHM611L	611L	Environ Chm II: Water Lab	CHM	Chemistry	0	Required laboratory for CHM 611.	GR	LB	Lab
Spring 2008	CHM612	612	Environ Chm III: Solids	CHM	Chemistry	3.5	Study of the problems of solid wastes, pesticides, food additives, and radioactive materials, including their chemical composition, effects, detection, disposal, and natural breakdown. 2 hours lecture, 3 hours lab or field project.	GR	LE	Lecture
Spring 2008	CHM612L	612L	Env Chem III: Solids Lab	CHM	Chemistry	0	Required laboratory for CHM 612.	GR	LB	Lab
Spring 2008	CHM617	617	Applied Chemical Spectro	CHM	Chemistry	3	Practical applications of various spectrophotometral techniques (mass spectroscopy, infrared spectroscopy, ultraviolet spectroscopy, and nuclear magnetic resonance) are integrated for the explanation of the structure of organic molecules. A problem-solving approach is used.	GR	LE	Lecture

Spring 2008	CHM625	625	Inorganic Preparations	CHM	Chemistry	3	A quarter course on a selected topic in the field of inorganic chemistry, such as the reactions of substances in non-aqueous solvents, metal chelate compounds, inorganic reaction mechanisms, ligand field theory, or the chemistry of the lanthanides and actinides.	GR	LB	Lab
Spring 2008	CHM635	635	Instrumental Analysis	CHM	Chemistry	3	Introduction to the theory and practice of modern chemical instrumentation. Topics include elementary electronics, spectrophotometry, atomic absorption, electrochemical techniques, chromatography, and other instrumental techniques.	GR	LE	Lecture
Spring 2008	CHM637	637	Electroanalytical Chem	CHM	Chemistry	3	Fundamental principles of electrochemistry and the application of electrochemical methods to chemistry and chemical analysis.	GR	LE	Lecture
Spring 2008	CHM640	640	Syn Medicinal Chem I	CHM	Chemistry	3	Various chemical aspects of drugs including the synthetic design, mode of action, and uses of various pharmaceuticals. Topics include cardiovascular agents, antibiotics, antitumor agents, and central nervous system drugs.	GR	LE	Lecture

Spring 2008	CHM641	641	Syn Medicinal Chem II	CHM	Chemistry	3	The detailed description of conformers, geometrical and optical isomers and their effects on molecular stability and reaction mechanisms.	GR	LE	Lecture
Spring 2008	CHM643	643	Chem Toxicology: Drugs	CHM	Chemistry	3	Study of the basic principles of chemical toxicology. Chemicals that have the greatest incidence of abuse are discussed in more detail with regard to their chemical-biological interactions, symptomatology of toxicity, clinical chemistry tests, and treatment.	GR	LE	Lecture
Spring 2008	CHM644	644	Chem Toxicology II: Envir	CHM	Chemistry	3	A study of the basic principles of chemical toxicology. Chemicals which have the greatest incidence of abuse are discussed in more detail with regard to their chemical-biological interactions, symptomatology of toxicity, clinical chemistry tests and treatment.	GR	LE	Lecture
Spring 2008	CHM645	645	Concepts in Chem - MST	CHM	Chemistry	4	Basic fundamental concerns of chemistry for early childhood education majors. Those concrete observable topics most appropriate for early childhood education minors will be emphasized. Course includes an in-depth study of heat and temperature.	GR	LE	Lecture

Spring 2008	CHM650	650	Concepts in Chemistry II	CHM	Chemistry	4.5	Concepts in chemistry II is for graduate students in middle childhood science education (MST Program). Course includes detailed study of chemical reactions, kinetics, environmental issues, acids/bases, and nuclear chemistry. Portfolio development will be utilized for students to learn the development of inquiry activities for the classroom.	GR	LE	Lecture
Spring 2008	CHM661	661	Synthetic Polymer Chm	CHM	Chemistry	3	(Also listed as BMS 726.) Step-growth and chain-growth polymerization in homogeneous and heterogeneous media; properties of commercial polymers.	GR	LE	Lecture
Spring 2008	CHM665	665	Physical Polymer Chm	CHM	Chemistry	3	(Also listed as BMS 725.) Introduction to the structural and physical aspects of macromolecules; emphasis on the relationship of polymer structure to physical and mechanical properties.	GR	LE	Lecture
Spring 2008	CHM667	667	Physical Polymer Chem Lab	CHM	Chemistry	1	(Also listed as BMS 727.) Laboratory illustrations of CHM 665 lecture material and techniques of polymer science. Corequisite: CHM 665.	GR	LB	Lab
Spring 2008	CHM668	668	Polymer Synthesis Lab	CHM	Chemistry	1	Laboratory illustrations of CHM 661 lecture material and techniques of polymer science.	GR	LB	Lab

Spring 2008	CHM669	669	Egr Plas: Mat & Des	CHM	Chemistry	4	(Also listed as ME 689.) Properties and manufacturing processes of engineering plastics and the effect of these factors on plastics design. Illustrative laboratory projects are included. 2 hours lecture, 4 hours lab.	GR	LE	Lecture
Spring 2008	CHM669L	669L	Egr Plas: Mat Proc & Des L	CHM	Chemistry	0	Required laboratory for CHM 669.	GR	LB	Lab
Spring 2008	CHM672	672	Crystal Struct Analysis I	CHM	Chemistry	4	More advanced methods of crystal analysis. Basic crystallographic computations.	GR	LE	Lecture
Spring 2008	CHM679	679	Materials Corrosion	CHM	Chemistry	4	A survey of principles of corrosion processes with application to metallic and non-metallic materials. Principles of electrochemistry are included.	GR	LE	Lecture
Spring 2008	CHM698	698	Chemistry for Ed Majors	CHM	Chemistry	1	Selected topics in chemical education. Directed readings or one-time offerings of topics related to the teaching of chemistry at various levels using different Pedagogical approached. May include summer workshops or institutes.	GR	LE	Lecture
Spring 2008	CHM700	700	Prin Instruction Chem	CHM	Chemistry	3	Survey of available instructional materials and discussion of educational theory and techniques leading to more effective instruction. For chemistry majors only.	GR	LE	Lecture

Spring 2008	CHM718	718	Chem Processes in Environ	CHM	Chemistry	3	Skills are developed to predict behavior and movement of chemical contaminants in atmospheric, aquatic, and soil systems. Physical and chemical properties of contaminants and environmental interactions are evaluated to determine their ultimate fate.	GR	LE	Lecture
Spring 2008	CHM720	720	Adv Inorganic Chemistry I	CHM	Chemistry	3	(Also listed as BMS 733.) Study of the modern theories of valence, structural inorganic chemistry, and the chemistry of nonmetals.	GR	LE	Lecture
Spring 2008	CHM721	721	Adv Inorganic Chem II	CHM	Chemistry	3	(Also listed as BMS 734.) Thorough examination of the chemistry of metals stressing the transition elements, ligand field theory, and mechanisms of inorganic reactions.	GR	LE	Lecture
Spring 2008	CHM722	722	Adv Inorganic Chem III	CHM	Chemistry	3	(Also listed as BMS 735.) Survey of the applications of physical methods in the examination of inorganic compounds.	GR	LE	Lecture
Spring 2008	CHM728	728	Photobiology	CHM	Chemistry	3		GR	LE	Lecture
Spring 2008	CHM730	730	Instrumentation	CHM	Chemistry	3	Introduction to the theory and practice of modern chemical instrumentation; elementary electronics, spectrophotometry, atomic absorption, electrochemical techniques, chromatography, and other instrumental techniques.	GR	LE	Lecture

Spring 2008	CHM735	735	Analytical Chemistry	CHM	Chemistry	3	A selected topic in the field of analytical chemistry such as chromatography, electroanalytical chemistry such as trace analysis, bioanalytical chemistry, advanced instrumental analysis, analytical spectroscopy, or separation methodology.	GR	LE	Lecture
Spring 2008	CHM744	744	Struct Concept Organ Chem	CHM	Chemistry	3	Study of molecular orbital theory, reactive species, theories of acids and bases, and an introduction to stereochemistry.	GR	LE	Lecture
Spring 2008	CHM746	746	Elements Organic Reaction	CHM	Chemistry	3	Discussion of the more important organic reactions including their scope, limitations, and mechanisms.	GR	LE	Lecture
Spring 2008	CHM748	748	Synthetic Organ Reactions	CHM	Chemistry	3	Systematic treatment of organic reactions including, where applicable, some theoretical basis for the nature of the reaction. Emphasis on the uses of these reactions in organic synthesis.	GR	LE	Lecture
Spring 2008	CHM750	750	Intro-Quantum Chemistry	CHM	Chemistry	3	Introduction to the ideas and mathematical techniques of quantum theory, including applications to some simple chemical systems.	GR	LE	Lecture
Spring 2008	CHM751	751	Chemical Kinetics	CHM	Chemistry	3	(Also listed as BMS 736.) Characterization of simple kinetic systems, experimental methods, energy distributions in molecules, the transition state method, and chain reactions in solution.	GR	LE	Lecture

Spring 2008	CHM752	752	Thermodynamics	CHM	Chemistry	3	Fundamentals of chemical thermodynamics; first, second, and third laws; applications to solutions.	GR	LE	Lecture
Spring 2008	CHM760	760	Chemical Equilibrium	CHM	Chemistry	3	An in depth treatment of ionic equilibria. Topics include pertinent mathematical operations used in equilibrium calculations. Chemical systems discussed will include strong and weak acids and bases, polyprotic as well as monoprotic acids and bases, precipitation complex formation and oxidation-reduction equilibria.	GR	LE	Lecture
Spring 2008	CHM761	761	Advanced Analytical Chem	CHM	Chemistry	3	Survey of the more popular and useful modern analytical methods. Topics include separation techniques, selective ion electrodes, spectroscopy, electrochemistry, mathematical techniques of data optimization, methods of sample preparation, precipitate formation, and organic analytical reagents.	GR	LE	Lecture
Spring 2008	CHM762	762	Mass Spectrometry	CHM	Chemistry	3	Current topics in mass spectrometry are discussed with emphasis on theory and state-of-the-art instrumentation and ionization methods.	GR	LE	Lecture

Spring 2008	CHM763	763	Analytical Separations	CHM	Chemistry	3	Theory of separations techniques are reviewed. The two techniques of gas and liquid chromatography are discussed with emphasis in column technology, inlet systems and detection devices.	GR	LE	Lecture
Spring 2008	CHM789	789	Continuing Registration	CHM	Chemistry	1		GR	IS	Independent Study
Spring 2008	CHM800	800	Seminar	CHM	Chemistry	0		GR	SE	Seminar
Spring 2008	CHM825	825	Select Topic Inorgan Chem	CHM	Chemistry	3	A quarter course on a selected topic in the field of inorganic chemistry, such as the reactions of substances in nonaqueous solvents, metal chelate compounds, inorganic reaction mechanisms, ligand field theory, or the chemistry of the lanthanides and actinides.	GR	LE	Lecture
Spring 2008	CHM830	830	Nucl & Elect Mag Res Spec	CHM	Chemistry	3	An examination of the theores and practices of N.M.R. and E.P.R. including examples of their applications to structural and kinetic studies of both organic and inorganic molecules.	GR	LE	Lecture
Spring 2008	CHM842	842	Organic Chen High Polymer	CHM	Chemistry	3	The chemistry and properties of high polymers including the organic chemistry of their preparation and the kinetics of polymerization.	GR	LE	Lecture

Spring 2008	CHM845	845	Select Topic Organic Chem	CHM	Chemistry	3	A selected topic in the field of organic chemistry, such as organic spectroscopy, heterocyclic chemistry, organometallic chemistry, and the chemistry of natural products.	GR	LE	Lecture
Spring 2008	CHM850	850	Quantum Chem	CHM	Chemistry	3	Principles and applications of quantum theory to chemical problems. Electronic structure of molecules and its correlation with the chemical and physical properties of substances.	GR	LE	Lecture
Spring 2008	CHM851	851	Stat Thermodynamics	CHM	Chemistry	3	Definition of partition function; translational, rotational, vibrational, and electronic partition functions and their calculation and application to thermodynamic problems. Calculation of thermodynamic functions from spectroscopic information.	GR	LE	Lecture
Spring 2008	CHM853	853	Group Theory	CHM	Chemistry	3	Introduction to group theory stressing its application in the areas of hybridization schemes, molecular orbitals, ligand field theory, and spectroscopy.	GR	LE	Lecture

Spring 2008	CHM855	855	Select Topic Phys Chem	CHM	Chemistry	3	(Also listed as BMS 738.) A selected topic in the field of physical chemistry such as molecular spectroscopy, advanced molecular structure, magnetic resonance, X-rays, crystal structure, statistical mechanics, and precision physical-chemical measurements.	GR	LE	Lecture
Spring 2008	CHM899	899	Research	CHM	Chemistry	1	Research for the thesis.	GR	IS	Independent Study
Spring 2008	CL150	150	Phlebotomy	CL	Clinical Laboratory Science	5	Theory and technique for obtaining blood specimens, including application of responsibilities associated with blood drawing in a clinical laboratory. Course spans two quarters. Graduates are eligible for national certification by exam.	UG	LE	Lecture
Spring 2008	CL194	194	Careers in EH, EXB, CL	CL	Clinical Laboratory Science	1	Provide students with an overview of the programs and career options in Biology, Clinical Laboratory Science, Exercise Biology and Environmental Health Science.	UG	LE	Lecture
Spring 2008	CL420	420	Orient Clinical Lab Sci	CL	Clinical Laboratory Science	2	Theory and application of lab safety, universal precautions, specimen collection, quality assurance, and other techniques fundamental to clinical laboratory.	UG	LL	Lecture/Lab Combination

Spring 2008	CL422	422	Laboratory Management	CL	Clinical Laboratory Science	2	Principles of education, laboratory management compuser application and completion and presentation of a scientific project (includes one week clinical rotation).	UG	LE	Lecture
Spring 2008	CL423	423	Clinical Pathology Sem	CL	Clinical Laboratory Science	2	Correlation of clinical findings through case studies.	UG	SE	Seminar
Spring 2008	CL431	431	Urine/Body Fluid Analys	CL	Clinical Laboratory Science	3	Study of body fluids, including the pathophysiology of their formation and the biochemical and morphologic methods used to obtain diagnostic information. Lecture and laboratory.	UG	LL	Lecture/Lab Combination
Spring 2008	CL441	441	Hematology	CL	Clinical Laboratory Science	4	Theory and application of principles of hematology, including hematopoiesis, counting and identification of cells in the peripheral blood, and the use of cellular morphology to diagnose disease. Lecture and laboratory.	UG	LL	Lecture/Lab Combination
Spring 2008	CL442	442	Advanced Hematology	CL	Clinical Laboratory Science	2	Advanced topics in hematology with an emphasis on the diagnosis and treatment of anemias, myelodysplastic and myeloproliferative disorders.	UG	LE	Lecture
Spring 2008	CL443	443	Hematology Practicum	CL	Clinical Laboratory Science	5	Practical application of hematology techniques at clinical site.	UG	LE	Lecture

Spring 2008	CL451	451	Principles of Hemostasis	CL	Clinical Laboratory Science	2	Principles of hemostasis involved in blood vessel contraction, platelet activation and formation, and activation of coagulation factors, and their use in diagnosing coagulation defects and monitoring anticoagulant therapy. Lecture and laboratory.	UG	LL	Lecture/Lab Combination
Spring 2008	CL461	461	Clinical Chemistry	CL	Clinical Laboratory Science	4	Theory and application of human biochemistry and principles of chemistry techniques used in the analysis of blood and other body fluids. Lecture and laboratory.	UG	LL	Lecture/Lab Combination
Spring 2008	CL462	462	Adv Clinical Chemistry	CL	Clinical Laboratory Science	3	Study of endocrine system, inborn errors of metabolism, toxicology, the role of tumor markers in cancer diagnosis and management, and other advanced topics in clinical chemistry.	UG	LE	Lecture
Spring 2008	CL463	463	Chemistry Practicum	CL	Clinical Laboratory Science	5	Practical application of clinical chemistry techniques at clinical site.	UG	PR	Practicum
Spring 2008	CL471	471	Diagnostic Micriobiology	CL	Clinical Laboratory Science	5	Study of media composition and selection, biochemical techniques used to identify bacteria and related physiology, antibiotic susceptibility of bacteria and discussion and identification of parasites. Lecture and laboratory.	UG	LL	Lecture/Lab Combination

Spring 2008	CL472	472	Adv Diagnos Microbiology	CL	Clinical Laboratory Science	2	Study of characteristics, pathophysiologic mechanisms and identification of chyamydia, fungi, viruses and other organisms and the methods used to diagnose and treat related diseases. Lecture only.	UG	LE	Lecture
Spring 2008	CL473	473	Microbiology Practicum	CL	Clinical Laboratory Science	5	Practical application of microbiology techniques at clinical site.	UG	PR	Practicum
Spring 2008	CL481	481	Immunology/ Serology	CL	Clinical Laboratory Science	4	Study of antigens and the stimulation of antibodies in vivo, and the use of these reactions to perform in vitro testing to diagnose and monitor the course of disease. Lecture and laboratory.	UG	LL	Lecture/Lab Combination
Spring 2008	CL491	491	Immunohematology	CL	Clinical Laboratory Science	3	Theory and application of immunology; specifically the use of antigens and antibodies in blood grouping and transfusion medicine.	UG	LE	Lecture
Spring 2008	CL492	492	Advanced Immunohematology	CL	Clinical Laboratory Science	2	Advanced topics in transfusion medicine, including immune hemolytic anemias, paternity testing, component therapy, HLA antigens, quality assurance and the role of regulatory agencies in the practice of transfusion medicine. Lecture only.	UG	LE	Lecture
Spring 2008	CL493	493	Transfusion Practicum	CL	Clinical Laboratory Science	4	Practical application of transfusion medicine techniques at clinical site.	UG	PR	Practicum

Spring 2008	CLS100	100	Latin & Greek Roots in En	CLS	Classics	4	Builds English vocabulary through a study of Latin and Greek roots. Emphasis on words used commonly in higher education rather than on specialized terminology.	UG	LE	Lecture
Spring 2008	CLS101	101	Medical & Sci Terminology	CLS	Classics	4	Spelling, recognition, and understanding contemporary specialized medical and scientific vocabulary that is based on the Latin and Greek languages. Emphasis on terminology of the medical sciences.	UG	LE	Lecture
Spring 2008	CLS150	150	Greek and Roman Culture	CLS	Classics	4	Survey of the development of classical culture from prehistoric Greece to the fall of the Roman Empire. A broad view of the interrelated political, economic, and social conditions, and philosophy, religion, mythology, literature, art, and architecture.	UG	LE	Lecture
Spring 2008	CLS160	160	Intro to Classical Mythology	CLS	Classics	3	Survey of the myths and legends of ancient Greece and Rome that are an important part of the Western literary and cultural tradition. Emphasis on story patterns and characters.	UG	LE	Lecture
Spring 2008	CLS204	204	Great Books:Classics	CLS	Classics	4	Reading, discussion, analysis of selected texts from ancient Greece and Rome; for example, the works of Homer, Sophocles, Plato, Virgil, Cicero, Horace.	UG	LE	Lecture
Spring 2008	CLS204W	204W	Writing in CLS 204	CLS	Classics	0	Required writing component for CLS 204.	UG	LB	Lab

Spring 2008	CLS260	260	Intro to Classical Mthol	CLS	Classics	4	A survey of the myths and legends of ancient Greece and Rome which are an important part of the Western literary and cultural tradition. The emphasis will be on story patterns and characters.	UG	LE	Lecture
Spring 2008	CLS260W	260W	Writing in CLS 260	CLS	Classics	0		UG	LB	Lab
Spring 2008	CLS300	300	How We Know Antiquity	CLS	Classics	4	How do we know what we think we know about classical antiquity? Study of the different types of evidence and of ways in which this evidence is analyzed, handled, and interpreted by scholars.	UG	LE	Lecture
Spring 2008	CLS310	310	Golden Age of Greece	CLS	Classics	4	Greek experience in fifth and fourth centuries B.C. with emphasis on Athenian democracy and the Golden Age of Athens: drama, history, oratory, and philosophy.	UG	LE	Lecture
Spring 2008	CLS320	320	Rome: Republic & Empire	CLS	Classics	4	Emphasis on late republic and early empire, particularly the Augustan age. The idealism of Virgil and Lucretius; the realism of Cicero, Sallust, and Tacitus.	UG	LE	Lecture
Spring 2008	CLS330	330	Studies in Ancient Lit	CLS	Classics	4	Drama, epic, and lyric poetry; prose; selected themes in ancient literature; and literary criticism.	UG	LE	Lecture
Spring 2008	CLS330W	330W	Writing in CLS 330	CLS	Classics	0	Required writing component for CLS 330.	UG	LB	Lab

Spring 2008	CLS340	340	Ancient Art & Archaeology	CLS	Classics	4	(Also listed as ART 411.) Greece in the Bronze Age; classical Greece and Rome; and selected areas of Greek and Roman archaeology.	UG	LE	Lecture
Spring 2008	CLS350	350	Ancient Culture & Soc	CLS	Classics	4	Greek and Roman civilization with evidence from art, literature, archaeology, law, and other sources.	UG	LE	Lecture
Spring 2008	CLS350W	350W	Writing in CLS 350	CLS	Classics	0		UG	LB	Lab
Spring 2008	CLS360	360	Studies:Ancient Mythology	CLS	Classics	4	Greek and Roman mythology; aspects and approaches to the study of myths; and archaeological and nonliterary sources.	UG	LE	Lecture
Spring 2008	CLS370	370	Studies:Ancnt: Law/Gov/Pol	CLS	Classics	4	Law and legal systems of Greece and Rome; government and administration; and political problems of the ancient world.	UG	LE	Lecture
Spring 2008	CLS370W	370W	Writing in CLS 370	CLS	Classics	0	Required writing component for CLS 370.	UG	LB	Lab
Spring 2008	CLS399	399	Studies-Selected Subjects	CLS	Classics	1	Course of variable content dealing with problems, approaches, and topics in the field of classics.	UG	IS	Independent Study
Spring 2008	CLS410	410	Adv Studies in Antiquity	CLS	Classics	4	Literature, mythology, law and government, art and archaeology, culture and society. Students must consult Department of Classics before registering.	UG	LE	Lecture
Spring 2008	CLS481	481	Independent Reading	CLS	Classics	4	Directed studies in literature, mythology, archaeology, law, and government. For classical humanities majors only.	UG	IS	Independent Study

Spring 2008	CLS481W	481W	Writing in CLS	CLS	Classics	0		UG	LB	Lab
Spring 2008	CLS497	497	Senior Project Classics	CLS	Classics	4	Guided research culminating in a major paper on a topic chosen by the student and the instructor. Students develop a comprehensive bibliography, prepare a detailed outline, and write and revise the final project.	UG	IS	Independent Study
Spring 2008	CLS499	499	Sr Comprehensive Review	CLS	Classics	2	Required of majors in the classics, Greek, or Latin. Independent study and review leading to comprehensive examination based on the course work undertaken by each individual student.	UG	IS	Independent Study
Spring 2008	CLS530	530	Studies in Ancient Lit	CLS	Classics	4	Course offers a variety of topics including drama, epic, and lyric poetry; prose; selected themes in ancient literature; and literary criticism.	GR	LE	Lecture
Spring 2008	CLS540	540	Ancient Art & Archeology	CLS	Classics	4	(Also listed as ART 611.) Greece in the Bronze Age; classical Greece and Rome; and selected areas of Greek and Roman art and archaeology.	GR	LE	Lecture
Spring 2008	CLS550	550	Ancient Culture & Society	CLS	Classics	4	Greek and Roman civilization with evidence from art, literature, archaeology, law, and other sources.	GR	LE	Lecture
Spring 2008	CLS560	560	Studies:Ancient Mythology	CLS	Classics	4	Greek and Roman mythology; aspects and approaches to the study of myth; archaeological and nonliterary sources.	GR	LE	Lecture

Spring 2008	CLS570	570	Studies:Ancnt: Law/Gov/Pol	CLS	Classics	4	Political problems of the ancient world; law and legal systems; and government and administration.	GR	LE	Lecture
Spring 2008	CLS600	600	Spec Projects in Classics	CLS	Classics	1	An intensive, short-term study of a particular aspect of Classical Antiquity, which may include matters of methodology or pedagogy. Titles vary.	GR	SE	Seminar
Spring 2008	CMH600	600	Student Initiated Elective	CMH	Community Health	2		MD	OT	Other
Spring 2008	CMH601	601	Biostatistics I	CMH	Community Health	4	Presents basic statistical measures with emphasis on biomedical problems. Includes sampling techniques, making valid inferences and estimations, and testing hypotheses. Practice in use of calculations and preparation of data for machine analysis.	GR	LE	Lecture
Spring 2008	CMH602	602	Biostatistics II	CMH	Community Health	3	Studies advanced statistical methods for analysis of variance, multiple regression, survey methods, design of experimental investigations, vital statistics, bioassays, and sequential analysis.	GR	LE	Lecture
Spring 2008	CMH604	604	Student Educ Prog for Children	CMH	Community Health	2		MD	OT	Other
Spring 2008	CMH606	606	Intervention: Substance Abuse	CMH	Community Health	2		MD	LE	Lecture
Spring 2008	CMH607	607	Ethics: Interprofessional	CMH	Community Health	2		MD	LE	Lecture

Spring 2008	CMH609	609	Women and Medicine	CMH	Community Health	2		MD	LE	Lecture
Spring 2008	CMH620	620	Biostatistics	CMH	Community Health	4	Introduction to the basic principles and applications of statistical methods as they are applied to data arising in the health professions. CMH 620 students will have additional requirements compared to the STT 520 students.	GR	LE	Lecture
Spring 2008	CMH621	621	Epidemiology I	CMH	Community Health	3	Nature of epidemiological studies; descriptive epidemiology; experimental and observational investigations; cross-sections; prospective and retrospective studies; mortality and morbidity measurements and factors affecting comparison; life tables; and introduction to demographic measurements.	GR	LE	Lecture
Spring 2008	CMH622	622	Epidemiology II	CMH	Community Health	3	Advanced techniques of epidemiological investigation. Epidemiology of specific chronic diseases such as cancer, diabetes, and cardiovascular and mental disorders. Introduction to environmental and occupational epidemiology. Students prepare research protocol on a given specific problem.	GR	LE	Lecture

Spring 2008	CMH623	623	Pub Hlth Epidemiology	CMH	Community Health	4	This course is an introduction to epidemiology including historical foundations, basic concepts, study designs, and practical applications. Emphasis is placed on epidemiological principles, concepts, and methods used within public health settings. Students will use skills acquired in the course to complete an applied project.	GR	LE	Lecture
Spring 2008	CMH640	640	Environmental Health	CMH	Community Health	4	This course focuses on the topics of Environmental Health that have the greatest effect on the community. It provides a survey of broad Environmental Public Health issues.	GR	LE	Lecture
Spring 2008	CMH641	641	Environmental Medicine I	CMH	Community Health	3	Interaction of humans with special environments. Section one is an intensive study of respiration, the cardiovascular system, and the physics and physiology of gaseous environments.	GR	SE	Seminar
Spring 2008	CMH642	642	Environmental Medicine II	CMH	Community Health	3	Interaction of humans with special environments. Section two covers mineral, chemical, and drug metabolism; function of sensory systems; and the physics and physiological stresses of heat and cold, sound, and electromagnetic and ionizing radiation.	GR	SE	Seminar

Spring 2008	CMH643	643	Environ Medicine III	CMH	Community Health	3	Interaction of humans with special environments. Section three studies effects of dynamic forces, biomechanics of the body, physiology of physical exercises, and engineering machines to improve human performance.	GR	SE	Seminar
Spring 2008	CMH651	651	Aerospace Medicine I	CMH	Community Health	4	General review, discussions of research projects, guest presentations, and selected advanced topics dealing with aerospace medicine, occupational medicine, and public health. Presentation and discussion of problem clinical cases related to aerospace medicine.	GR	SE	Seminar
Spring 2008	CMH652	652	Aerospace Medicine II	CMH	Community Health	2	Covers civil pilot medical case histories including presentation of the medical condition that the pilot experienced, the implications by medical certification, and the proper steps in denying or certifying the pilot. M.D. degree required. May be taken for letter grade or pass/unsatisfactory.	GR	SE	Seminar

Spring 2008	CMH654	654	Intro to Comm Med	CMH	Community Health	2	Familiarization with activities and services encompassed by community medicine, including public health, preventive medicine, prospective medicine, occupational medicine, geriatric health, handicapped services, and health promotion. May be taken for letter grade or pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	CMH655	655	Hyperbaric Medicine	CMH	Community Health	3	Mechanisms of hyperbaric oxygen therapy, equipment, safety considerations, and limitations. Conditions particularly amenable to this therapy are explored: decompression sickness, air embolism, gas gangrene, CO poisoning, and elective indications. May be taken for letter grade of pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	CMH656	656	Clinical Aerospace Med	CMH	Community Health	4	Introduction to and familiarization with clinical activities and operational experiences in Aeromedical Services (Flight Medicine, Occupational Medicine, Environmental Health, Bioenvironmental Surveillance, and Physiological Training). Enrollment in Aerospace Medicine Residency program or department approval required.	GR	SE	Seminar

Spring 2008	CMH671	671	Prin: Occupational Health	CMH	Community Health	3	Presents the medical department in industry: its role, functions, administration, physical facilities, personnel, equipment, records, costs, benefits, intramural relationships and extramural relationships with professional societies, official agencies, organized labor, and paramedical occupations.	GR	SE	Seminar
Spring 2008	CMH672	672	Clinical Occupation Hlth	CMH	Community Health	3	Principles of physical examination and diagnosis are applied to selection, placement, and return to work of industrial employees. Surveys of a variety of work environments are conducted with emphasis on potential health hazards. Course includes field experience.	GR	SE	Seminar
Spring 2008	CMH700	700	Aerospace Accidents	CMH	Community Health	4	Overview of aerospace accident investigation procedures, concerned regulations, and interdisciplinary management from an aeromedical perspective. Selected advance topics include the analyses of relevant aerospace accident reports, post-crash survivability, and future directions.	GR	SE	Seminar

Spring 2008	CMH701	701	Spec Topics: Comm Med Aero	CMH	Community Health	3	Provides the philosophy underlying each major aerospace medicine standard. It also explores the aerospace medical factors that convert safe flight into hazardous flight. M.D. degree and departmental approval required. May be taken for letter grade or pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	CMH705	705	Intro to Pub Hlth/Policy	CMH	Community Health	4	Development of a broad knowledge base in public health, a dynamic and multidisciplinary field, by introducing its core components, including environmental science, epidemiology, biostatistics, health policy, health services management, economics, and socio-behavioral science.	GR	LE	Lecture
Spring 2008	CMH711	711	Special Seminars in ASM	CMH	Community Health	3	Participants discuss the influence and value of aerospace medicine on an international basis in light of new and proposed aeromedical technological developments.	GR	SE	Seminar

Spring 2008	CMH721	721	Aeromed Con&Op Flt Envir	CMH	Community Health	3	Builds on the basics of the aeromedical concerns to advance the understanding of the relevant aeromedical aspects related to the operational flight environment. Practical experiences in the hypobaric chamber, acceleration, and life support facilities supplement course work.	GR	SE	Seminar
Spring 2008	CMH723	723	Human Factors in Aerospace Med	CMH	Community Health	3	Studies the role human factors play in the safety of the aerospace and aerospace medical environments. Topics include resource management, communications, performance, situational awareness and human factors in aerospace related accidents/incidents.	GR	LE	Lecture
Spring 2008	CMH731	731	Health Services Admin	CMH	Community Health	3	(Also listed as MGT 755.) Overview of total health care system including public and private institutions and agencies, federal and state regulations, and methods of financing. Directed study of major contemporary forces affecting the health care delivery system. Class includes seminars and on-site experiences.	GR	SE	Seminar

Spring 2008	CMH734	734	Health Systems Management	CMH	Community Health	1	This course will introduce the student to health systems as an overriding mechanism of health care delivery and explore topics of quality, evidence-based medicine, health economies, ethics, leadership, health care policy, and utilization management.	GR	LE	Lecture
Spring 2008	CMH744	744	Population-Based Mgmt	CMH	Community Health	4	This course will enable students to apply techniques of epidemiology and biostatistics to evaluate population-based health programs. In addition, students will become familiar with principles of public health, prevention, and health care quality management.	GR	LE	Lecture
Spring 2008	CMH754	754	Strat Ldrshp in Hlth Care	CMH	Community Health	1	This course will introduce students to strategic management as practiced in health care settings. Principles of organizational behavior and culture will be examined and techniques in negotiation, leadership, and strategic analysis will be applied.	GR	LE	Lecture
Spring 2008	CMH764	764	Public Health Aspects Disate	CMH	Community Health	4	This course is designed to meet the need for a recognized curriculum in the Public Health aspects of disaster care and organized emergency medical services systems. Analytical and assessment skills will be emphasized.	GR	LE	Lecture

Spring 2008	CMH765	765	Interagency Disaster	CMH	Community Health	4	This course covers a board range of topics, problems and activities involved in developing a comprehensive plan of response to a major life and property-threatening emergency at the local level.	GR	LE	Lecture
Spring 2008	CMH766	766	Terrorism Effects Public	CMH	Community Health	4	The course provides an understanding of terrorism, the motivation, and ways in which it impacts individuals and society and the effects of a terrorist incident on Public Health.	GR	LE	Lecture
Spring 2008	CMH770	770	Social Behavior Health	CMH	Community Health	4		GR	LE	Lecture
Spring 2008	CMH771	771	Global Health	CMH	Community Health	4	This course will introduce the students to global health concepts. Social constructs of health will be reviewed, as well as how environmental factors and political decision-making affect global and international health.	GR	LE	Lecture
Spring 2008	CMH772	772	Global Health Systems	CMH	Community Health	4	This course introduces the principles of structures and mechanisms of global health systems focused on the developed countries. It will explore the possible approaches to improve the health systems at national and global levels.	GR	LE	Lecture
Spring 2008	CMH775	775	Application Research HPR	CMH	Community Health	4		GR	LE	Lecture

Spring 2008	CMH789	789	Continuing Registration	CMH	Community Health	1		GR	IS	Independent Study
Spring 2008	CMH791	791	Independent Study	CMH	Community Health	1	Independent study of topics in community health.	GR	LE	Lecture
Spring 2008	CMH800	800	Student-Initiated Elective	CMH	Community Health	4		MD	CL	Clinical
Spring 2008	CMH802	802	Intro Clin Occupat'nl Med	CMH	Community Health	8		MD	CL	Clinical
Spring 2008	CMH803	803	Hospice: IP/OP Care	CMH	Community Health	4		MD	LE	Lecture
Spring 2008	CMH804	804	Systems Approach Health Care	CMH	Community Health	4		MD	CL	Clinical
Spring 2008	CMH805	805	Research Ethics	CMH	Community Health	4		MD	CL	Clinical
Spring 2008	CMH806	806	Literature and Medicine	CMH	Community Health	4		MD	CL	Clinical
Spring 2008	CMH807	807	Community Medicine	CMH	Community Health	8		MD	CL	Clinical
Spring 2008	CMH810	810	Public Health Practice	CMH	Community Health	1	This practice placement is intended to provide an intensive Applied Public Health learning experience. Students must complete 120 hours of supervised practice in an approved public community site.	GR	IS	Independent Study

Spring 2008	CMH811	811	Public Health Research	CMH	Community Health	1	Students taking this course will develop skills and knowledge required for public health professionals to effectively utilize the thesis/dissertation model, to conduct literature review, and to successfully complete both qualitative & quantitative analysis.	GR	LE	Lecture
Spring 2008	CMH818	818	HSM Practice Placement	CMH	Community Health	1	The practice placement will provide the student with the opportunity to engage in any area of population health, health systems, health policy, health economics and/or health finance.	GR	IS	Independent Study
Spring 2008	CMH820	820	Culminating Experience	CMH	Community Health	1	Under supervision of an advisor, students choose research problems, prepare literature searches, design research methodology and conduct applied research. A full report is written and presented before a graduate committee.	GR	IS	Independent Study
Spring 2008	CMH821	821	Culminating Experience	CMH	Community Health	1	Under supervision of an advisor, students choose research problems, prepare literature searches, design research methodology and conduct applied research. A full report is written and presented before a graduate committee.	GR	IS	Independent Study

Spring 2008	CMH828	828	Health Systems Comm	CMH	Community Health	2	This course will introduce students to concepts, principles, and practices of communications in multiple health systems and health care settings. Students will develop their knowledge in areas including effective communication styles, interpersonal relations, etc.	GR	SE	Seminar
Spring 2008	CMH850	850	Aero Med Projects	CMH	Community Health	4	A major project for class presentation at year's end.	GR	IS	Independent Study
Spring 2008	CMH899	899	Aerospace Med Research	CMH	Community Health	3	Under supervision of an advisor, students choose research problems, prepare bibliographical searches, plan experimental protocol, and conduct experimentation. A full report, constituting a thesis, is written and defended before a graduate committee.	GR	IS	Independent Study
Spring 2008	CMH900	900	Extramural	CMH	Community Health	4		MD	H	Hospital
Spring 2008	CNL210	210	Understand Emotionl Intel	CNL	Counseling	4	This course explores the topic of emotional intelligence and its relevance to I.Q. The course will focus on the benefits of emotional intelligence and its application to education of youth.	UG	LE	Lecture
Spring 2008	CNL210W	210W	Writing in CNL 210	CNL	Counseling	0		UG	LB	Lab

Spring 2008	CNL461	461	Principles of Counseling	CNL	Counseling	4	Overview of major counseling theories and tech-niques. Review of historical foundations of the mental health movement. Social, psychological, and philosophical influences are considered.	UG	LE	Lecture
Spring 2008	CNL463	463	Mental Health	CNL	Counseling	4	Factors influencing behavior of individuals; methods a counselor may use in observing, analyzing, and improving attitudes and behavior.	UG	LE	Lecture
Spring 2008	CNL464	464	Crisis Intervention	CNL	Counseling	4	Introduction to the background, theory, practice, and needs of crisis intervention within the helping professions. A variety of crisis intervention models are explored, as are the various community resources available to the crisis intervention worker.	UG	LE	Lecture
Spring 2008	CNL467	467	Group Backgrnd & Theory	CNL	Counseling	4	Surveys the background, theory, patterns of function, technique of facilitating, and use of small groups in counseling.	UG	LE	Lecture
Spring 2008	CNL470	470	Workshop in:	CNL	Counseling	1	Intensive study of selected areas from counselor education to meet the particular needs of participating students, schools, and agencies.	UG	LE	Lecture

Spring 2008	CNL661	661	Principles of Counseling	CNL	Counseling	4	Overview of major counseling theories and techniques and review of historical foundations of the mental health movement. Social, psychological, and philosophical influences are considered.	GR	LE	Lecture
Spring 2008	CNL662	662	Prob Stu Personality&Dev	CNL	Counseling	4	Considers physical, psychological, and personality development of students in terms of the interrelationship of these factors and their effects on student functioning. Family, school, and other social-psychological environments are studied in terms of their effect on behavior.	GR	LE	Lecture
Spring 2008	CNL663	663	Mental Health I	CNL	Counseling	4	Introduces students in human services to basic phychopathology, factors influencing the behavior of individuals and methods a counselor may use in observing, analyzing and improving attitudes and behavior.	GR	LE	Lecture
Spring 2008	CNL664	664	Crisis Intervention Cnl	CNL	Counseling	1	Introduces students to the background, theory, practice, and needs of crisis intervention within the helping professions. A variety of crisis intervention models are explored, as are the various community resources available to the crisis intervention worker.	GR	LE	Lecture

Spring 2008	CNL667	667	Group Background&Theory	CNL	Counseling	4	Surveys the background, theory, patterns of function, techniques of facilitating, and the uses of small groups in counseling.	GR	LE	Lecture
Spring 2008	CNL670	670	Counseling Workshop	CNL	Counseling	1	Selected topics in the human services area on a workshop or a one-time class basis are considered. Topics and titles vary.	GR	LE	Lecture
Spring 2008	CNL751	751	Cnl Skills for Educators	CNL	Counseling	3	Assists teachers in developing an understanding of the counseling needs of children. Teachers develop counseling skills needed to assist students in the classroom. Appropriate referrals to other school professionals are discussed.	GR	LE	Lecture
Spring 2008	CNL762	762	Career Devel & Inf Serv	CNL	Counseling	4	Presents career development as a series of vocational/avocational choices in the process of self-realization and considers the effect of rapid social and technological change on this process.	GR	LE	Lecture

Spring 2008	CNL765	765	Pupil Pers Serv Sch & Comm	CNL	Counseling	4	Presents theoretical aspects concerning the organization and administration of guidance services; practical application of principles to schools and other organizations. Surveys social agencies, both public and private, that counselors should be familiar with. An analysis of the referral process and the methods of interagency cooperation.	GR	LE	Lecture
Spring 2008	CNL767	767	Group Proc Counsel&Guid	CNL	Counseling	4	Serves as an introduction to group counseling practice. Considers interaction patterns and dynamics within small groups, and focuses on understanding of individual and group behavior as they relate to the individuals taking the course. Evaluation and research of group processes are also considered.	GR	LL	Lecture/Lab Combination

Spring 2008	CNL769	769	Tech of Child Counseling	CNL	Counseling	4	Stresses the theories and techniques of counseling children. Discusses the differences between counseling with adults and counseling with children. Specific aspects considered are role and function of a child counselor, group and individual counseling with children, vocational information for children, scholastic and personality testing of children, and treatment methodology (including play therapy, family counseling, and teacher collaboration).	GR	LE	Lecture
Spring 2008	CNL770	770	Indep Study Minor Prob	CNL	Counseling	1	Planned reading and/or project under the guidance of a counselor education program faculty member. May be taken for a letter grade or pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	CNL773	773	Mental Health II	CNL	Counseling	4	Acquaints students with preventive mental health, advocacy roles, legal and ethical issues, and interdisciplinary approaches to community mental health.	GR	LE	Lecture
Spring 2008	CNL778	778	Techniques Play Therapy	CNL	Counseling	4	Investigation of the techniques of play therapy for children ages 3 to 12. An advanced seminar for students interested in individual and group play and its therapeutic implications for schools and agencies.	GR	LE	Lecture

Spring 2008	CNL779	779	Marriage&Family Counsel	CNL	Counseling	4	Considers principles and techniques of marriage and family counseling from a variety of theoretical orientations. Laboratory and/or field experience may be required.	GR	LE	Lecture
Spring 2008	CNL780	780	Sys Theory & Family Cnl	CNL	Counseling	4	Introduces the student to an indepth analysis of family systems theory and its application to marriage and family counseling.	GR	LE	Lecture
Spring 2008	CNL781	781	Adv Techn of Family Cnl	CNL	Counseling	4	Advanced technique and intervention course that focuses on family systems interventions. Emphasis on applications of family counseling, providing in-depth treatment of the major approaches to family counseling.	GR	LE	Lecture
Spring 2008	CNL782	782	Techniques Marital Cnl	CNL	Counseling	4	In-depth overview of marital counseling. Focuses on techniques and interventions that emphasize the application of the major schools of marital counseling. Course is experientially and performance focused; student participation is encouraged and expected in a variety of role-playing situations.	GR	LE	Lecture
Spring 2008	CNL860	860	Adv Seminar in Counseling	CNL	Counseling	1	Provides an opportunity for students to further develop skills in counseling, appraisal, research, or other related areas under faculty direction.	GR	SE	Seminar

Spring 2008	CNL863	863	Techniques of Counseling	CNL	Counseling	4	Laboratory practice in individual counseling techniques; focuses on the development of basic skills and procedures.	GR	LL	Lecture/Lab Combination
Spring 2008	CNL864	864	Practicum I: Individual	CNL	Counseling	1	Provides an experience in counseling and guidance in which students, under supervision, actually counsel individuals in educational, vocational, and personal areas.	GR	IN	Internship
Spring 2008	CNL865	865	Individ & Grp Practicum	CNL	Counseling	4	Provides an experience in counseling and guidance in which students, under supervision, actually counsel individuals in educational, vocational, and personal areas.	GR	IN	Internship
Spring 2008	CNL867	867	Internship:	CNL	Counseling	1	This field-based experience provides human services master's degree students with advanced clinical practice and supervision in their major specialty areas.	GR	IN	Internship
Spring 2008	CNL950	950	Pers Theory & Psychpathy	CNL	Counseling	4	Focuses on the development of personality throughout the life span and associated difficulties that can occur for individuals. Additional emphasis will be given to adaptation and the coping process.	GR	LE	Lecture

Spring 2008	CNL951	951	Clin Assess in Cnl Prac	CNL	Counseling	4	This course studies supervised clinical practice in the administration of mental health assessment instruments. Emphasizes advanced methods of administering and interpreting standardized tests. Includes use of assessment procedures in diagnosis and treatment planning.	GR	LE	Lecture
Spring 2008	CNL952	952	Diagnosis & Clin Cnl Prac	CNL	Counseling	4	Clinical course designed to introduce students to comprehensive diagnostic evaluation. Students gain familiarity with the Current Diagnostic and Statistical Manual and International Classification of Disease via lecture as well as case formulations.	GR	LL	Lecture/Lab Combination
Spring 2008	CNL953	953	Case Form & Clin Interven	CNL	Counseling	4	Focuses on treatment planning for clients. A variety of different treatment approaches will be discussed for DSM III-R disorders, syndromes, and other client problems.	GR	LE	Lecture
Spring 2008	CNL954	954	Intern: Adv Clinical Cnl	CNL	Counseling	1	This field-based experience provides practicing master's level counselors with the opportunity for supervised advanced clinical counseling practice.	GR	IN	Internship

Spring 2008	CNL960	960	Adv Instit Human Ser Pers	CNL	Counseling	1	Individual and group study of current problems and issues for counselors. Also provides a focus on the development of new skills related to counseling interventions. Topics might include professional ethics and responsibilities, crisis intervention and human sexuality.	GR	SE	Seminar
Spring 2008	CNL961	961	Counseling the Gifted	CNL	Counseling	3	Overviews the special social/emotional needs of gifted children and youth. Focuses on techniques to help gifted children experience their emotions, and to develop awareness and understanding of themselves.	GR	LE	Lecture
Spring 2008	CNL971	971	Counsel for Life Develop	CNL	Counseling	4	Developmental factors influencing the behavior of individuals across the life-span and the unique counseling strategies that are employed with clients in the human services at different points on the life-span continuum.	GR	LE	Lecture
Spring 2008	CNL972	972	Legal Prof Ethic Issues H	CNL	Counseling	4	Surveys the various legal, professional, and ethical concerns most often encountered by human service providers.	GR	LE	Lecture

Spring 2008	CNL973	973	Soc Cultural Found Counse	CNL	Counseli ng	4	Focuses on studies of change, ethnic groups, subcultures, changing roles of women, sexism, urban and rural populations, and differing life patterns. Involves experiential and didactic material and looks at individual attitudes and beliefs.	GR	LE	Lecture
Spring 2008	COM101	101	Essentials Public Address	COM	Commun ication	4	Fundamentals of verbal and nonverbal communication in platform speaking. Discussion and practice in vocal and physical delivery and in purposeful organization and development of a speech.	UG	LE	Lecture
Spring 2008	COM101L	101L	Essen Public Address Lab	COM	Commun ication	0	Required laboratory for COM 101.	UG	LB	Lab
Spring 2008	COM103	103	Communicatio n for Teach	COM	Commun ication	3	Examination of types of communication in the classroom. Principles and practice of oral and written communication in story-telling, lecturing, discussion, and interpersonal communication.	UG	LE	Lecture
Spring 2008	COM104	104	Intro to Human Com	COM	Commun ication	4	This course surveys major concepts, theories, and research approaches in the study of human communication. The course assists students in developing requisite knowledge and skills in the development of their own communication competence.	UG	LE	Lecture
Spring 2008	COM104L	104L	Intro to Human Com Lab	COM	Commun ication	0	Required laboratory for COM 104.	UG	LB	Lab

Spring 2008	COM130	130	Intro Com Activities	COM	Communication	1	Research, practice, and participation in communication forums, symposia, or an oral communication project designed to meet the interest of individual students. Independent study. Graded pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	COM152	152	Mass Communication	COM	Communication	4	Study of mass media functions, industries, and effects to help students become more critical mass media consumers and contributors.	UG	LE	Lecture
Spring 2008	COM200	200	Writing to Communicate	COM	Communication	4	Instruction and practice in writing to inform and persuade, emphasizing analysis of purpose, strategy, organization, style, and correct language. Instruction in use of information sources, including computer-linked data bases.	UG	LR	Lecture/Recitation Combination
Spring 2008	COM200W	200W	Writing in COM 200	COM	Communication	0	Required writing component for COM 200.	UG	LB	Lab
Spring 2008	COM203	203	Business Communication	COM	Communication	3	Interorganizational communication skills for job interviewing, persuasive proposals, departmental meetings, oral report presentations, and job appraisals are experienced along with employee communications to accomplish job tasks.	UG	LE	Lecture
Spring 2008	COM203L	203L	Business Communication Lab	COM	Communication	0		UG	LB	Lab

Spring 2008	COM221	221	Speaking Prof Contexts	COM	Communication	4	Theory and practice of speaking in professional contexts. Experience in preparation and delivery of professional presentations.	UG	LE	Lecture
Spring 2008	COM253	253	Basic Video Production	COM	Communication	3	(Also listed as TH 253.) A basic introduction to the use of video production equipment using lecture, demonstration, and experiential approaches. Appropriate laboratory time provided in television studio.	UG	LR	Lecture/Recitation Combination
Spring 2008	COM256	256	Basic Media Writing	COM	Communication	4	(Also listed as ENG 257.) Introduction to writing for media. Structure and organization of media copy. Course requires reporting in the field.	UG	LE	Lecture
Spring 2008	COM256W	256W	Writing in COM 256	COM	Communication	0	Required writing component for COM 256.	UG	LB	Lab
Spring 2008	COM325	325	Health Communication	COM	Communication	4	Examination of the basic themes and issues that have developed in health communication research including physician-patient and nurse-patient communications, organizational communication in health care organizations, and relationships among care providers.	UG	LE	Lecture
Spring 2008	COM330	330	Adv Communica Activities	COM	Communication	1	Research, practice, and participation in communication forums, symposia, or an oral communication project designed to meet the interest of individual students. Independent study. Graded pass/unsatisfactory.	UG	IS	Independent Study

Spring 2008	COM333	333	Persuasion & Rhetoric	COM	Communication	4	Delineation of the concept of persuasion together with an overview of general rhetorical theory. Experience in preparation and presentation of persuasive communication.	UG	LE	Lecture
Spring 2008	COM333W	333W	Writing in COM 333	COM	Communication	0	Required writing component for COM 333.	UG	LB	Lab
Spring 2008	COM345	345	Pub Relations:Prin & Prac	COM	Communication	4	Simulation focusing on the processes of a public-relations campaign: fact finding, action planning, implementation of communication channels, and program evaluation. Experiences focus on one internal and one external campaign for students.	UG	LE	Lecture
Spring 2008	COM345W	345W	Writing in COM 345	COM	Communication	0	Required writing component for COM 345.	UG	LB	Lab
Spring 2008	COM346	346	PR Campaigns	COM	Communication	4	Development of skills necessary for effective planning and implementation of public relations campaigns. Includes audiences and media analysis, and the design and writing of a variety of campaign materials.	UG	LE	Lecture
Spring 2008	COM346W	346W	Writing in COM 346	COM	Communication	0		UG	LB	Lab
Spring 2008	COM347	347	Case Studies in PR	COM	Communication	4	In-depth analysis of the public relations process through an examination of various cases involving public relations problems.	UG	LE	Lecture
Spring 2008	COM347W	347W	Writing in COM 347	COM	Communication	0		UG	LB	Lab

Spring 2008	COM358	358	Emerging Com Technologies	COM	Communication	4	Examines developing communication technologies with emphasis on alternative delivery systems.	UG	LE	Lecture
Spring 2008	COM360	360	Broadcast Journalism	COM	Communication	4	Examination of broadcast news with special attention given to coverage, selection, and reporting of the news.	UG	LE	Lecture
Spring 2008	COM360W	360W	Writing in COM 360	COM	Communication	0		UG	LB	Lab
Spring 2008	COM364	364	Communication Graphics	COM	Communication	4	(Also listed as ENG 364.) Introduces basic principles of graphics communication, primarily as applied to print media. Includes history and basic concepts of graphics communication, typography, photo editing, and graphic design.	UG	LE	Lecture
Spring 2008	COM365	365	Iss in Mass Communicatn	COM	Communication	4	An in-depth examination of the major issues facing the American mass media, including such topics as media effects, content of programming, the commercialization of public broadcasting, media ownership, children's programming, and others.	UG	LE	Lecture
Spring 2008	COM366	366	Advanced News Writing	COM	Communication	4	(Also listed as ENG 366.) Advanced study of writing skills, practices, and procedures used in reporting news for mass media. Actual reporting in the field is required. News writing skills introduced in COM 256 are further refined.	UG	LE	Lecture

Spring 2008	COM366 W	366W	Writing in COM 366	COM	Communication	0	Required writing component for COM 366.	UG	LB	Lab
Spring 2008	COM368	368	Photo Communication	COM	Communication	4	Introduces basic principles of visual literacy and visual communication, and utilization of light and shadow, creative devices, and other techniques in creation of photographs and multi-picture layouts suitable for publication in mass media.	UG	LE	Lecture
Spring 2008	COM370	370	Dispute Resolution	COM	Communication	4	Conflict is a normal and inevitable consequence of human existence. This course focuses on the nature and cause of conflict, the impact of communication on conflict escalation, and the process of conflict resolution.	UG	LE	Lecture
Spring 2008	COM370 W	370W	Writing in COM 370	COM	Communication	0	Required writing component for COM 370.	UG	LB	Lab
Spring 2008	COM399	399	Studies Selected Subjects	COM	Communication	1	Problems, approaches, and topics in the field of speech. Topics vary.	UG	LE	Lecture
Spring 2008	COM400	400	Senior Portfolio	COM	Communication	2	A capstone course in which advanced communication majors develop portfolios to demonstrate achievements as preparation for careers in professional or academic areas of communication. Course includes formal assessment of communication skills. Senior standing required.	UG	SE	Seminar
Spring 2008	COM400 W	400W	Writing in COM 400	COM	Communication	0	Required writing component for COM 400.	UG	LB	Lab

Spring 2008	COM401	401	Communicatio n Theory	COM	Commun ication	4	A study of various classical and contemporary theories of communication. An examination of theories related to communication systems, communication interaction, and social contexts.	UG	LE	Lecture
Spring 2008	COM401 W	401W	Writing in COM 401	COM	Commun ication	0	Required writing component for COM 401.	UG	LB	Lab
Spring 2008	COM411	411	Performance for Media	COM	Commun ication	4	Development of skills necessary for effective television and radio presentations. Study of criteria for selecting appropriate talent and frequent practice in a wide range of media settings.	UG	LE	Lecture
Spring 2008	COM429	429	Urban Comm Theory	COM	Commun ication	4	(Also listed as PLS 429.) Processes and institutions by which individuals and groups communicate in an urban environment. Model of an urban communication system developed by interdisciplinary systems approach.	UG	LE	Lecture
Spring 2008	COM432	432	Race, Class & Gender Com	COM	Commun ication	4	Theoretical and pragmatic consideration of the impact of race, class, and gender on the communication process within society.	UG	LE	Lecture
Spring 2008	COM439	439	Freedom of Speech	COM	Commun ication	4	Study of the growth and development of free speech in the United States. Emphasizes the development of definitions of free speech and various communication strategies in different settings.	UG	LE	Lecture

Spring 2008	COM441	441	Adv Interpersonal Comm	COM	Communication	4	In-depth view of interpersonal communication skills: presenting, receiving, and challenging. A group context is used to promote self-directed changes in interpersonal style.	UG	LE	Lecture
Spring 2008	COM441W	441W	Writing in COM 441	COM	Communication	0	Required writing component for COM 441.	UG	LB	Lab
Spring 2008	COM443	443	Interviewing	COM	Communication	4	Through a matrix organizational structure, students experience theory in selection, survey, journalistic, performance appraisal, persuasion, and counseling interviewing situations with the focus on human resource development.	UG	LE	Lecture
Spring 2008	COM443W	443W	Writing in COM 443	COM	Communication	0	Required writing component for COM 443.	UG	LB	Lab
Spring 2008	COM446	446	Org Com Theory	COM	Communication	4	Elements of the communication process as pertinent to the field of organizational communication. By developing understanding, a framework is established for contextual applications of the features of organizations.	UG	LE	Lecture
Spring 2008	COM446W	446W	Writing in COM 446	COM	Communication	0	Required writing component for COM 446.	UG	LB	Lab
Spring 2008	COM447	447	Com Relationships in Org	COM	Communication	4	This course examines factors that help and hinder effective professional relationships. Two major course goals are to increase understanding of interpersonal relationships and to apply the knowledge to individual and organizational goals.	UG	LE	Lecture

Spring 2008	COM447W	447W	Writing in COM 447	COM	Communication	0		UG	LB	Lab
Spring 2008	COM448	448	Com Strategic Leadership	COM	Communication	4	This course provides students with an understanding of the relationship between communication and leadership. The course examines how communication theories provide a context for understanding how to effectively facilitate change within groups.	UG	LE	Lecture
Spring 2008	COM448W	448W	Writing in COM 448	COM	Communication	0		UG	LB	Lab
Spring 2008	COM449	449	Survey of Com Research	COM	Communication	4	Provides a basic knowledge of the behavioral approach and current theories and experiments in communications research.	UG	LE	Lecture
Spring 2008	COM449W	449W	Writing in COM 449	COM	Communication	0	Required writing component for COM 449.	UG	LB	Lab
Spring 2008	COM451	451	Com Training Methods	COM	Communication	4	This course examines the design and implementation of communication training programs including ethics, needs assessment, and evaluation. Students will develop training plans and materials and apply those in actual training presentations.	UG	LE	Lecture
Spring 2008	COM451W	451W	Writing in COM 451	COM	Communication	0	Required writing component for COM 451.	UG	LB	Lab

Spring 2008	COM452	452	Communication Consulting	COM	Communication	4	This course is designed to provide a theoretical and practical understanding of communication consulting. Issues covered include ethics, needs assessment and evaluation, design and implementation, and communication variables in the client/consultant relationship.	UG	LE	Lecture
Spring 2008	COM453	453	Negotiating & Bargain Com	COM	Communication	4	This course focuses on the theory and processes of negotiation to help students understand the behavior of individuals in competitive situations. The course is designed to cover a broad spectrum of negotiation problems.	UG	LE	Lecture
Spring 2008	COM453W	453W	Writing in COM 453	COM	Communication	0	Required writing component for COM 453.	UG	LB	Lab
Spring 2008	COM454	454	Feature Story Writing	COM	Communication	4	(Also listed as ENG 454.) Finding, writing, polishing, and marketing feature material.	UG	LE	Lecture
Spring 2008	COM454W	454W	Writing in COM 454	COM	Communication	0		UG	LB	Lab
Spring 2008	COM455	455	Nonverbal Communication	COM	Communication	4	Theory, survey of research, and experiential learning in nonverbal communication. Exploration of types and forms, and methods of sending and receiving nonverbal communication.	UG	LE	Lecture

Spring 2008	COM457	457	Intercultural Communicat	COM	Communication	4	Study of communication in intercultural environments. Emphasis on research and theory to better understand the complexity of intercultural communication interactions.	UG	LE	Lecture
Spring 2008	COM457W	457W	Writing in COM 457	COM	Communication	0	Required writing component for COM 457.	UG	LB	Lab
Spring 2008	COM458	458	Editing for the Media	COM	Communication	4	(Also listed as ENG 458.) Editing of copy for mass media with special emphasis on newspaper format, headline writing, rewriting, and general copy desk.	UG	LE	Lecture
Spring 2008	COM458W	458W	Writing in COM 458	COM	Communication	0		UG	LB	Lab
Spring 2008	COM460	460	Program & Mgt Elect Media	COM	Communication	4	Analysis of programs and program strategies for broadcast and other electronic media. Emphasis on information for managing these media.	UG	LE	Lecture
Spring 2008	COM462	462	Mass Media:Law/Regulation	COM	Communication	4	Study of laws and regulations affecting mass media.	UG	LE	Lecture
Spring 2008	COM464	464	Broadcast Criticism	COM	Communication	4	Analysis of contemporary programming and production practices including the development of critical standards for evaluation.	UG	LE	Lecture
Spring 2008	COM464W	464W	Writing in COM 464	COM	Communication	0	Required writing component for COM 464.	UG	LB	Lab
Spring 2008	COM471	471	Topics in Communicatio n	COM	Communication	4	Examination of special topics in the various areas of speech communication. Titles vary.	UG	LE	Lecture

Spring 2008	COM475	475	Dispute Systems Design	COM	Communication	4	This course examines the design and implementation of dispute resolution systems to achieve fairness and efficacy. Various methods of dispute resolution including negotiation, conciliation, mediation and arbitration will be examined in different contexts.	UG	LE	Lecture
Spring 2008	COM481	481	Independent Study	COM	Communication	1	Faculty-directed readings and research.	UG	IS	Independent Study
Spring 2008	COM482	482	Senior Honors Project	COM	Communication	1	Independent studies course that allows students to pursue research that culminates in a senior honors thesis or project.	UG	IS	Independent Study
Spring 2008	COM491	491	Techniques & Evaluation	COM	Communication	1	Philosophy and techniques of conducting communication events. Includes the planning, initiating, and summarizing of communication activities, and evaluating written and oral performance.	UG	IS	Independent Study
Spring 2008	COM611	611	Performance for Media	COM	Communication	4	Development of skills necessary for effective television and radio presentations. Study of criteria for selecting appropriate talent, and frequent practice in a wide range of media settings.	GR	LE	Lecture
Spring 2008	COM621	621	Language Development	COM	Communication	4	The development of speech and language in the preschool years.	GR	LE	Lecture

Spring 2008	COM629	629	Urban Comm Theory	COM	Communication	4	Processes and institutions by which individuals and groups communicate in an urban environment. Model of an urban communication system developed by interdisciplinary systems approach.	GR	LE	Lecture
Spring 2008	COM632	632	Gender & Communication	COM	Communication	4	Theoretical and pragmatic consideration of how and why men's and women's communication behaviors are similar to one another in some instances, yet different in others, and how men and women can communicate more effectively.	GR	LE	Lecture
Spring 2008	COM639	639	Freedom of Speech	COM	Communication	4	Study of the growth and development of free speech in the United States. Emphasis on the development of definitions of free speech and various communication strategies in different settings.	GR	LE	Lecture
Spring 2008	COM641	641	Adv Interpersonal Comm	COM	Communication	4	In-depth view of interpersonal communication skills: presenting, receiving, and challenging. A group context is used to promote self-directed changes in interpersonal style.	GR	LE	Lecture
Spring 2008	COM643	643	Interviewing	COM	Communication	4	Through a matrix organizational structure, students experience theory in selection, survey, journalistic, performance appraisal, persuasion, and counseling interviewing situations.	GR	LE	Lecture

Spring 2008	COM645	645	Conference Leadership	COM	Communication	4	Simulation that focuses on the creation, development, and execution of a professional conference through assessment of participants' needs. Experiences include completing group tasks through assigned roles developed from current leadership theories.	GR	LE	Lecture
Spring 2008	COM647	647	Organization Communica	COM	Communication	4	Application of organizational communication theories and major theoretical perspectives to problems in public and private-sector organizations. Includes a simulation which focuses on conflict management, leadership, and decision making in a business context.	GR	LE	Lecture
Spring 2008	COM648	648	Case Studies in Org Com	COM	Communication	4	A critical analysis of communication issues and problems in organizations through an examination of various cases.	GR	LE	Lecture
Spring 2008	COM649	649	Survey of Com Research	COM	Communication	4	Provides a basic knowledge of the behavioral approach and of the current theories and experiments being conducted in communication research.	GR	LE	Lecture
Spring 2008	COM651	651	Comm Consulting & Train	COM	Communication	4	By means of a matrix structure, consulting and training theories are experienced in communication programs and processes as a methodology for human resource development.	GR	LE	Lecture

Spring 2008	COM653	653	Communication & Conflict	COM	Communication	4	In-depth study of the function of communication in conflict/crisis situations. Emphasis on the role that communication performs in conflict resolution in intrapersonal, interpersonal, group, and international situations.	GR	LE	Lecture
Spring 2008	COM654	654	Feature Story Writing	COM	Communication	4	(Also listed as ENG 654.) Includes finding, writing, polishing, and marketing feature material.	GR	LE	Lecture
Spring 2008	COM655	655	Nonverbal Communication	COM	Communication	4	Theory, survey of research, and experimental learning in nonverbal communication. Exploration of types and forms and of methods of sending and receiving nonverbal communication.	GR	LE	Lecture
Spring 2008	COM657	657	Intercultural Communicat	COM	Communication	4	Study of communication in intercultural environments. Emphasis on research and theory to better understand the complexity of intercultural communication interactions.	GR	LE	Lecture
Spring 2008	COM658	658	Editing for the Media	COM	Communication	4	(Also listed as ENG 658.) Editing of copy for mass media with emphasis on newspaper format, headline writing, rewriting, and general copy desk.	GR	LE	Lecture
Spring 2008	COM662	662	Mass Media Law & Regulati	COM	Communication	4	Includes the study of laws and regulations affecting mass media.	GR	LE	Lecture

Spring 2008	COM664	664	Broadcast Criticism	COM	Communication	4	Analysis of contemporary programming and production practices including the development of critical standards for evaluation.	GR	LE	Lecture
Spring 2008	COM671	671	Topics in Communication	COM	Communication	4	Examination of special topics in the various areas of speech communication. Titles vary.	GR	LE	Lecture
Spring 2008	COM689	689	Com with the Elderly	COM	Communication	4	Analysis of the unique communication behaviors of the elderly and the physical, social, and emotional changes that cause these behaviors. Development of interpersonal, interviewing, and reporting skills by direct interaction with this age group. 3 hours lecture, 1 hour off-campus interviewing.	GR	LE	Lecture
Spring 2008	COM741	741	Prins & Appli Com Theory	COM	Communication	4	Examines communication theory relevant to the role of the communication specialist. Special consideration given to the changing pattern of communication roles and the application of communication theory to the problems of the utilization specialist. Also focuses on the possible consequences of the diffusion of communication innovations within the business, educational, and governmental institutions of American society.	GR	LE	Lecture
Spring 2008	COM781	781	Independent Research	COM	Communication	1	Supervised independent research on a specific subject.	GR	IS	Independent Study

Spring 2008	COM789	789	Continuing Registration	COM	Communication	1		GR	IS	Independent Study
Spring 2008	CPE001	001	Field Experience	CPE	Cooperative Education	0		UG	IN	Internship
Spring 2008	CPE091	091	Cooperative Education I	CPE	Cooperative Education	0		UG	IN	Internship
Spring 2008	CPE092	092	Cooperative Education II	CPE	Cooperative Education	0		UG	IN	Internship
Spring 2008	CPL310	310	Prob in Comparative Lit	CPL	Comparative Literature	4	Readings in comparative literature dealing with themes, myths, genres, literary movements, or characters; e.g., the myth of Electra in the modern theater, the picaresque novel, existentialism in European fiction, and the ambitious hero in literature.	UG	LE	Lecture
Spring 2008	CPL310W	310W	Writing in CPL 310	CPL	Comparative Literature	0		UG	LB	Lab
Spring 2008	CPL399	399	Studies-Selected Subjects	CPL	Comparative Literature	1	Problems, approaches, and topics in the field of comparative literature. Topics vary.	UG	LE	Lecture
Spring 2008	CPL405	405	Theory Comparative Lit	CPL	Comparative Literature	4	History and development of comparative literature as a discipline; study of basic reference works and journals; papers and reports based on comparative studies.	UG	LE	Lecture

Spring 2008	CS141	141	Computer Programming I	CS	Computer Science	4	Introduction to use of computers as a problem-solving tool. Examples from and applications to a broad range of problems. Methodology for algorithm design and for structured modular implementation is stressed. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CS141L	141L	Computer Program I Lab	CS	Computer Science	0	Required laboratory for CS 141.	UG	LB	Lab
Spring 2008	CS142	142	Computer Programming II	CS	Computer Science	4	Concepts introduced in CS 141 are developed in greater detail and depth. Emphasis on verification and testing of programs. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CS142L	142L	Computer Program II Lab	CS	Computer Science	0	Required laboratory for CS 142.	UG	LB	Lab
Spring 2008	CS205	205	Intro Comp Office Soft	CS	Computer Science	4	Introductory course in the use of computers in a professional environment. Personal computer work stations are employed and used for popular applications (e.g., word processing, spreadsheets and data base management, and electronic mail). Two hours lecture, four hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	CS206	206	Comp Soft Prod Tools	CS	Compute r Science	4	Advanced use of application software to increase productivity. Covers sharing data and files among different packages, spreadsheet macros and database integration.	UG	LE	Lecture
Spring 2008	CS207	207	Advanced Office Productivity	CS	Compute r Science	4	Emphasis is placed on understanding how packages interact within an integrated environment. Personal computers are used for sophisticated word processing and desktop publishing projects. State-of-the-art presentation techniques such as hypertext will be discussed.	UG	LE	Lecture
Spring 2008	CS208	208	Comp Prog for Bus I	CS	Compute r Science	4	Introduces basic concepts of programming. Examples are from business applications and display graphics. Emphasis is on problem solving with the computer as a tool.	UG	LE	Lecture
Spring 2008	CS208L	208L	Comput Prog Bus I Lab	CS	Compute r Science	0	Required laboratory for CS 208.	UG	LB	Lab
Spring 2008	CS209	209	Comp Prog for Bus II	CS	Compute r Science	4	Continuation of CS 208. Introduces the basic concepts of programming. Examples are from business applications and display graphics. Emphasis is on problem solving with the computer as a tool.	UG	LE	Lecture
Spring 2008	CS209L	209L	Comp Prog Bus II Lab	CS	Compute r Science	0	Required laboratory for CS 209.	UG	LB	Lab

Spring 2008	CS214	214	Visual Basic Programming	CS	Compute r Science	4	An introductory course to the use of graphic objects in a windows event-driven environment providing a case study of object-oriented programming with Visual Basic in Microsoft Windows to develop simple graphic user interfaces. Need to be familiar with programming concepts.	UG	LE	Lecture
Spring 2008	CS240	240	Computer Programming I	CS	Compute r Science	4	Basic concepts of programming and programming languages are introducted. Emphasis is on structured programming and stepwise refinement.	UG	LE	Lecture
Spring 2008	CS240L	240L	Computer Prg I Lab	CS	Compute r Science	0	Required laboratory for CS 240.	UG	LB	Lab
Spring 2008	CS241	241	Computer Programming II	CS	Compute r Science	4	A continuation of CS 240. The emphasis is on data abstraction and software engineering.	UG	LE	Lecture
Spring 2008	CS241L	241L	Computer Prog II Lab	CS	Compute r Science	0	Required laboratory for CS 241.	UG	LB	Lab
Spring 2008	CS242	242	Computer Programming III	CS	Compute r Science	4	Further refinement of the concepts covered in CS 241.	UG	LE	Lecture
Spring 2008	CS242L	242L	Computer Prog III Lab	CS	Compute r Science	0	Required laboratory for CS 242.	UG	LB	Lab

Spring 2008	CS271	271	Intro to Bioinformatics	CS	Compute r Science	4	Tools-oriented approach to bioinformatics emphasizing data structure and DNA, string representation in PERL, data searches, pairwise alignments, substitution patterns, protein structure prediction and modeling, proteomics, and the use of web-based bioinformatic tools.	UG	LE	Lecture
Spring 2008	CS302	302	Intro to Oracle/SQL DB	CS	Compute r Science	4	Relational client server database design and access techniques. Includes building database tables, writing SQL statements/programs, and developing user interfaces and reports for data retrieval using the internet.	UG	LE	Lecture
Spring 2008	CS316	316	Numerical Methods I	CS	Compute r Science	4	Introduction to numerical methods used in the sciences. Methods of interpolation, data smoothing, functional approximation, integration, solutions of systems of equations, and solutions of ordinary differential equations. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CS317	317	Numerical Methods II	CS	Compute r Science	4	An introduction to numerical methods used in the sciences. Included will be methods of interpolation, data smoothing, functional approximation, integration, solutions of systems of equations, and solutions of ordinary differential equation. 3 hrs lecture, 2 hrs. laboratory.	UG	LE	Lecture

Spring 2008	CS340	340	Programming Lang Workshop	CS	Compute r Science	1	Self-directed study in computer languages. Individual workshops are offered in significant languages such as JAVA, COBOL, PL/1, SNOBOL, LISP, SIMSCRIPT, and GPSS. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	CS350	350	Comp Tools Data Analysis	CS	Compute r Science	4	Introduction to the representation, visualization, and modeling of large data sets. Data analysis using standard high level software tools. Topics include data filtering, clustering, classification, and data mining.	UG	LE	Lecture
Spring 2008	CS399	399	Selected Topics	CS	Compute r Science	1	Selected topics in computer science. May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independe nt Study
Spring 2008	CS400	400	Data Struc & Algorithms	CS	Compute r Science	4	Study of the implementation of data structures and control structures in professional computer programs. Introduction to the fundamentals of complexity and analysis. Study of common standard problems and solutions (e.g., transitive closure and critical path). Emphasis on high-level language software design. Three hours lecture, two hours lab.	UG	LE	Lecture

Spring 2008	CS405	405	Intro Data Base Mgt Sys	CS	Compute r Science	4	Survey of logical and physical aspects of database management systems, including entity-relationship and relational data models; physical implementation methods; query languages; SQL, relational algebra, relational calculus, and QBE; experience in creating and manipulating databases.	UG	LE	Lecture
Spring 2008	CS407	407	Optimization Techniques	CS	Compute r Science	3	(Also listed as MTH 407.) Concepts of minima and maxima; linear programming; simplex method, sensitivity, and duality; transportation and assignment problems; and dynamic programming.	UG	LE	Lecture
Spring 2008	CS409	409	Principles of AI	CS	Compute r Science	4	Problem-solving methods in artificial intelligence (AI) with emphasis on heuristic approaches. Topics include methods of representation, search, intelligent agents, planning, learning, natural language processing, logic, inference, robotics, and case-based reasoning. Three hours lecture, two hours lab.	UG	LL	Lecture/La b Combinati on
Spring 2008	CS410	410	Theory of Computing	CS	Compute r Science	4	(Also listed as MTH 410.) Turing machines; 5-recursive functions; equivalence of computing paradigms; Church-Turing thesis; undecidability; intractability. Three hours lecture, two hours lab.	UG	LE	Lecture

Spring 2008	CS415	415	Social Impl of Computing	CS	Compute r Science	3	Examines the impact of computers and computing on society. Topics include privacy, dangers introduced by computers performing critical tasks, the effect of robots on the work force, the impact of computers on education, and the new legal issues introduced by computing.	UG	LE	Lecture
Spring 2008	CS415W	415W	Writing in CS 415	CS	Compute r Science	0	Required writing component for COM 415.	UG	LB	Lab
Spring 2008	CS419	419	Cryptog & Data Security	CS	Compute r Science	3	(Also listed as MTH 419.) Introduction to the mathematical principles of data security. Various developments in cryptography are discussed, including public-key encryption, digital signatures, the data encryption standard (DES), and key safeguarding schemes.	UG	LE	Lecture
Spring 2008	CS458	458	Applied Graph Theory	CS	Compute r Science	3	(Also listed as MTH 458.) Introduction to methods, results, and algorithms from graph theory. Emphasis on graphs as mathematical models applicable to organizational and industrial situations.	UG	LE	Lecture

Spring 2008	CS459	459	Combinatorial Tools	CS	Compute r Science	3	(Also listed as MTH 459.) Introduction to some of the mathematical tools needed for an understanding of computer programming. The topics covered are summations, elementary number theory, combinatorial identities, generating functions, and asymptotics.	UG	LE	Lecture
Spring 2008	CS466	466	Intro Formal Languages	CS	Compute r Science	4	Introduction to the theory of formal languages and automata. Emphasis is on those classes of languages commonly encountered by computer scientists (e.g., regular and context-free languages).	UG	LE	Lecture
Spring 2008	CS470	470	Systems Simulation	CS	Compute r Science	4	Introduction to simulation and comparison with other techniques. Discrete simulation models. Introduction to queuing theory and stochastic processes. Comparison of simulation languages. Simulation methodology and selected applications. Three hours lecture, two hours lab.	UG	LE	Lecture

Spring 2008	CS471	471	Bioinformatic Algorithms	CS	Compute r Science	4	Theory-orientated approach to the application of contemporary algorithms to bioinformatics. Graph theory, complexity theory, dynamic programming and optimization techniques are introduced in the context of application toward solving specific computational problems in molecular genetics.	UG	LE	Lecture
Spring 2008	CS480	480	Comparative Languages	CS	Compute r Science	4	Basic concepts and special-purpose facilities in programming languages examined through several representative languages. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	CS482	482	Scan,Pars,Se mantic Analy	CS	Compute r Science	4	Study and use of tools for performing lexical, syntactic, and semantic analysis of computer-oriented languages.	UG	LE	Lecture
Spring 2008	CS495	495	Undergraduat e Thesis	CS	Compute r Science	4	Completion of a computer science research project. Writing and defending a thesis that describes the research and summarizes the results.	UG	IS	Independe nt Study
Spring 2008	CS499	499	Selected Topics	CS	Compute r Science	1	Selected topics in computer science. May be taken for letter grade or pass/unsatisfactory, at instructor's option.	UG	IS	Independe nt Study

Spring 2008	CS516	516	Numerical Methods I	CS	Compute r Science	4	(Also listed as MTH 516, 517.) Introduction to numerical methods used in the sciences. Includes methods of interpolation, data smoothing, functional approximation, integration, solutions of systems of equations, and solutions of ordinary differential equations. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CS517	517	Numerical Methods II	CS	Compute r Science	4	(Also listed as MTH 516, 517.) Introduction to numerical methods used in the sciences. Includes methods of interpolation, data smoothing, functional approximation, integration, solutions of systems of equations, and solutions of ordinary differential equations. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CS550	550	Comp Tools Data Analysis	CS	Compute r Science	4	Introduction to the representation, visualization, and modeling of large data sets. Data analysis using standard high level software tools. Topics include data filtering, clustering, classification, and data mining.	UG	LE	Lecture

Spring 2008	CS600	600	Data Struc & Algorithms	CS	Compute r Science	4	Study of the implementation of data structures and control structures in professional computer programs. Introduction to the fundamentals of complexity and analysis. Study of common standard problems and solutions (e.g., transitive closure and critical paths). Emphasis is on high-level language software design. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CS605	605	Intro to Data Mgt Systems	CS	Compute r Science	4	Survey of logical and physical aspects of database management systems, including entity-relationship and relational data models; physical implementation methods; query languages; SQL, relational algebra, relational calculus, and QBE: experience in creating and manipulating databases.	GR	LE	Lecture
Spring 2008	CS607	607	Optimization Techniques	CS	Compute r Science	3	(Also listed as MTH 607.) Concepts of minima and maxima; linear programming; simplex method; densitivity, and duality; transportation and assignment problems, dynamic programming.	GR	LE	Lecture

Spring 2008	CS609	609	Principles of AI	CS	Compute r Science	4	Problem-solving methods in artificial intelligence (AI) with emphasis on heuristic approaches. Topics include knowledge representation, search, intelligent agents, planning, learning, natural language processing, logic, inference, robotics, and case-based reasoning. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/La b Combinati on
Spring 2008	CS610	610	Theory of Computing	CS	Compute r Science	4	(Also listed as MTH 610) Turing Machines; partial-recursive functions; equivalence of computing paradigms; Church-Turing thesis; undercidability; intractability.	GR	LE	Lecture
Spring 2008	CS619	619	Cryptog & Data Security	CS	Compute r Science	3	(Also listed as MTH 619.) Introduction to the mathematical principles of data security. Various developments in cryptography are discussed, including public-key encryption, digital signatures, the data encryption standard (DES), key safeguarding schemes.	GR	LE	Lecture
Spring 2008	CS658	658	Applied Graph Theory	CS	Compute r Science	3	(Also listed as MTH 658.) Introduction to methods, results, and algorithms from graph theory. Emphasis on graphs as mathematical models applicable to organizational and industrial situations.	GR	LE	Lecture

Spring 2008	CS659	659	Combinatorial Tools	CS	Compute r Science	3	(Also listed as MTH 659.) Introduction to some of the mathematical tools needed for understanding computer programming. Topics include summations, elementary number theory, combinatorial identities, generating functions, and asymptotics.	GR	LE	Lecture
Spring 2008	CS666	666	Intro Formal Languages	CS	Compute r Science	4	Introduction to the theory of formal languages and automata. Emphasis is on those classes of languages commonly encountered by computer scientists (e.g. regular and context-free lanugages)	GR	LE	Lecture
Spring 2008	CS670	670	Systems Simulation	CS	Compute r Science	4	Introduction to simulation and comparison with other techniques; discrete simulation models; introduction to queuing theory and stochastic processes; comparison of simulation languages; simulation methodology; selected applications of simulation. Students must show ability to solve problems using simulation techniques. 3 hours lecture, 2 hours lab.	GR	LE	Lecture

Spring 2008	CS671	671	Bioinformatic Algorithms	CS	Compute r Science	4	Theory-oriented approach to the application of contemporary algorithms to bioinformatics. Graph Theory, complexity theory, dynamic programming and optimization techniques are introduced in the context of application toward solving specific computational problems in molecular genetics.	GR	LE	Lecture
Spring 2008	CS680	680	Comparative Languages	CS	Compute r Science	4	Basic concepts and special purpose facilities in programming languages, examined through several representative languages. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CS682	682	Scan, Pars, Semntic Analy	CS	Compute r Science	4	Study and use of tools for performing lexical, syntactic, and semantic analysis of computer-oriented languages.	GR	LE	Lecture
Spring 2008	CS699	699	Selected Topics	CS	Compute r Science	1	Study of selected topics in computer science. Titles vary. May be taken for a letter grade or pass/unsatisfactory.	GR	IS	Independe nt Study
Spring 2008	CS700	700	Prin Instr computer Sci	CS	Compute r Science	3	A survey of available instructional materials and discussion of educational theory and techniques leading to more effective instruction. For graduate teaching assistants in the Department of Computer Science only.	GR	IS	Independe nt Study

Spring 2008	CS701	701	Database Sys & Design	CS	Compute r Science	4	Introduction to basic goals and techniques in the design and implementation of information retrieval systems. Input, file organization, search strategies, output, language design, and evaluation techniques are covered. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CS705	705	Data Mining	CS	Compute r Science	4	Data forms, data preparation, cleaning, feature selection, diseretization, high-level statistical analysis; associations; calssification; clustering, data cubes; interestingness, cross-validation; visualization; scalability; privacy and ethics; applications. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/La b Combinati on
Spring 2008	CS707	707	Information Retrieval	CS	Compute r Science	4	This course covers models for information retrieval, techniques for indexing and searching, algorithms for classification and clustering, latent semantic indexing, link analysis and ranking.	GR	LE	Lecture
Spring 2008	CS711	711	Knowledge-Based Systems	CS	Compute r Science	4	Continuation of CS 609. Topics covered include techniques for handling judgmental knowledge, semantic networks, and frame-based systems. Useful constructs and architectures for AI systems are discussed. 3 hours lecture, 2 hours lab.	GR	LE	Lecture

Spring 2008	CS712	712	Adv Topics in AI	CS	Compute r Science	4	Covers advanced topics in artificial intelligence theory and applications. These are taken from such areas as natural language processing, machine learning, advanced AI programming techniques, and search and planning.	GR	LE	Lecture
Spring 2008	CS714	714	Machine Learning I	CS	Compute r Science	4	Reviews the development of machine learning paradigms. Introductory topics include parameter adjustment methods, signature tables, and the application of genetic algorithms to artificial intelligence problem domains.	GR	LE	Lecture
Spring 2008	CS716	716	Numerical Analysis I	CS	Compute r Science	4	(Also listed as MTH 716.) Topics chosen with emphasis on computational linear algebra. Systems of linear equations and Gaussian elimination; computation of eigenvalues and eigenvectors; matrix exponential; norm and condition number; and iterative methods.	GR	LE	Lecture
Spring 2008	CS717	717	Numerical Analysis II	CS	Compute r Science	4	(Also listed as MTH 717.) Finite difference methods for partial differential equations; analysis of stability and convergence.	GR	LE	Lecture

Spring 2008	CS718	718	Numerical Analysis III	CS	Compute r Science	4	(Also listed as MTH 718.) Finite element methods for elliptic boundary value problems; analysis of errors; approximation by finite element spaces; effects of curved boundaries, numerical integration; finite element methods for parabolic problems.	GR	LE	Lecture
Spring 2008	CS735	735	Eval & Pred Sys Perform	CS	Compute r Science	4	Introduction to the modeling and analysis of computer system performance as a function of the hardware and software components of the system. 3 hours lecture, 2 hours lab. Completion of a statistics course required.	GR	LE	Lecture
Spring 2008	CS740	740	Comp Complex & Algorithm	CS	Compute r Science	4	Time complexity analysis of algorithms; computational complexity; NP completeness. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CS765	765	Foundations of Neurocomp	CS	Compute r Science	4	Information processing in neural networks as a mode of computation complementary to symbolic artificial intelligence, emphasizing common ideas across different network architectures. Current applications in machine learning and spatiotemporal pattern recognition will be evaluated.	GR	LE	Lecture

Spring 2008	CS766	766	Evolutionary Computing	CS	Compute r Science	4	Explores evolutionary computation from a historical, theoretical, and an application viewpoint. Evolutionary search techniques including genetic algorithms, evolutionary programming, and genetic programming applied to problems in control, optimization, and classification are presented.	GR	LE	Lecture
Spring 2008	CS767	767	Fuzzy Set Theory	CS	Compute r Science	4	Provides an introduction to fuzzy set theory that serves as a basis for the study of fuzzy rule-based systems, pattern classification, function approximation, modeling, and information processing.	GR	LE	Lecture
Spring 2008	CS771	771	Natural Lang Techniques	CS	Compute r Science	4	Survey of issues that arise in computer understanding of natural languages like English. Topics include significance of language structure in extracting meaning, ambiguities, parsing techniques and case studies.	GR	LE	Lecture
Spring 2008	CS772	772	Adv Natural Lang Concpts	CS	Compute r Science	4	Continuation of CS 771. Computational methods for dealing with natural language semantics are introduced. Topics include semantic networks, conceptual dependency graphs, and formal logic as a semantic model.	GR	LE	Lecture

Spring 2008	CS774	774	Logic Programming	CS	Compute r Science	4	Theory and practice of logic programming. Application of Prolog to artificial intelligence, language analysis, and symbolic programming. Some attention to implementation issues, constraint logic programming, and concurrent logic languages. An acquaintance with Prolog is assumed.	GR	LE	Lecture
Spring 2008	CS776	776	Functional Programming	CS	Compute r Science	4	In-depth look at functional programming techniques, and functional languages and their implementation.	GR	LE	Lecture
Spring 2008	CS780	780	Compiler Design & Const	CS	Compute r Science	4	Complete compiler for a small programming language is discussed. Topics covered are scanning, syntax analysis, and code generation. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CS781	781	Compiler Design&Const II	CS	Compute r Science	4	Continuation of CS 780. Topics are covered in more depth. Project is required. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CS782	782	Compiler Design&Const III	CS	Compute r Science	4	Continuation of CS 781. Concentration on major design project. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CS784	784	Programming Languages	CS	Compute r Science	4	Programming paradigms and concepts for high level programming languages. Techniques for formal specification.	GR	LE	Lecture
Spring 2008	CS789	789	Continuing Registration	CS	Compute r Science	1		GR	IS	Independe nt Study

Spring 2008	CS790	790	Selected Topics Comp Sci:	CS	Compute r Science	4	Lectures on and study of selected topics in current research and recent developments in computer science. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	CS795	795	Independent Study	CS	Compute r Science	1	Special problems in advanced computer science topics. Graded pass/unsatisfactory.	GR	IS	Independe nt Study
Spring 2008	CS799	799	Thesis	CS	Compute r Science	1	Graded pass/unsatisfactory.	GR	IS	Independe nt Study
Spring 2008	CS801	801	Adv topic in Database Sys	CS	Compute r Science	4	Continuation of CS 701 with emphasis on relational databases and distributed systems. Current literature will be reviewed. At least one programming project bridging the gap from theory to practice.	GR	LE	Lecture
Spring 2008	CS805	805	Advanced Data Mining	CS	Compute r Science	4	This advanced data mining course covers concepts and techniques on sequence mining, text mining, graph mining, data cube mining, microarray gene expression mining, stream mining, time series mining, web mining, bioinformatics, privacy issues, etc.	GR	LE	Lecture
Spring 2008	CS840	840	Adv Topic-Theory of Compu	CS	Compute r Science	4	Continuation of CS 610, 666, and 740. Covers advanced topics taken from formal language theory, predicate calculus, algorithm analysis, and complexity theory. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/La b Combinati on

Spring 2008	CS865	865	Adv Topics in Soft Comp	CS	Compute r Science	4	Covers advanced topics in soft computing. Soft computing paradigms include fuzzy set theory, neural networks, evolutionary computing, and probabilistic and statistical techniques. Particularly, relationships and interactions between these disciplines will be explored.	GR	LE	Lecture
Spring 2008	CS875	875	Semantic Web	CS	Compute r Science	4	Semantic web extends current web using research in fields such as knowledge representation, AI, and database. Data is made meaningful and machine processable, leading to next generation of search, integration, and analysis.	GR	LE	Lecture
Spring 2008	CS884	884	Adv Topics in Prog Lang	CS	Compute r Science	4	Continuation of CS 784. Emphasis on formal methods for specifying and defining both the syntax and the semantics of programming languages.	GR	LE	Lecture
Spring 2008	CS890	890	Selected Topics	CS	Compute r Science	1	Selected topics in computer science and engineering.	GR	IS	Independe nt Study
Spring 2008	CS891	891	PhD Seminar	CS	Compute r Science	1	Registration in the Ph.D. seminar is required of all students seeking the Ph.D. in computer science and engineering. Graded pass/unsatisfactory.	GR	SE	Seminar

Spring 2008	CS892	892	PhD Qualifying Exam	CS	Compute r Science	1	Examination that tests understanding of the fundamentals necessary to begin concentrated study in chosen Ph.D. research area. Composed of written tests and an oral exam. Must be passed within two attempts. Graded pass/unsatisfactory.	GR	IS	Independe nt Study
Spring 2008	CS894	894	Candidacy Exam	CS	Compute r Science	1	Examination that tests for depth of understanding in a chosen computer science and computer engineering research area. Includes a written proposal for a Ph.D. topic and an oral examination, that is open to the public. Graded pass/unsatisfactory.	GR	IS	Independe nt Study
Spring 2008	CS895	895	Independent Study	CS	Compute r Science	1	Independent study in a chosen area for Ph.D. research. Graded pass/unsatisfactory.	GR	IS	Independe nt Study
Spring 2008	CS896	896	Dissertation Defense	CS	Compute r Science	1	Examination on the Ph.D. dissertation. The written dissertation is submitted and must be successfully defended in the oral exam conducted by the dissertation committee. Graded pass/unsatisfactory.	GR	IS	Independe nt Study
Spring 2008	CS897	897	Residency Research	CS	Compute r Science	1	Research on the Ph.D. dissertation topic taken in residence. Graded pass/unsatisfactory.	GR	IS	Independe nt Study
Spring 2008	CS898	898	Dissertation Research	CS	Compute r Science	1	Research on the Ph.D. dissertation topic not taken in residence. Graded pass/unsatisfactory.	GR	IS	Independe nt Study

Spring 2008	CSE250	250	Comp Nonwest Econ Systems	CSE	Comparative Studies/ CSE	4	Examination of political processes and economic systems in Asia, Africa, Latin America, and the Middle East with special attention to contemporary issues. Titles vary.	UG	LE	Lecture
Spring 2008	CSE250W	250W	Writing in CSE 250	CSE	Comparative Studies/ CSE	0	Required writing component for CSE 250.	UG	LB	Lab
Spring 2008	CST221	221	Comp NW Environments	CST	Comparative Studies	4	Examination of distinctive environments of Asia and Africa through analysis of the geographic patterns of land use, population, settlements, economic activities, languages, religions, and political systems.	UG	LE	Lecture
Spring 2008	CST221W	221W	Writing in CST 221	CST	Comparative Studies	0	Required writing component for CST 221.	UG	LB	Lab
Spring 2008	CST231	231	Comp Nonwest Literature	CST	Comparative Studies	4	Examination of the world views of selected non-Western peoples and their varied expressions in literature, emphasizing examples from Asia, Africa, Latin America, and the Middle East.	UG	LE	Lecture
Spring 2008	CST231W	231W	Writing in CST 231	CST	Comparative Studies	0	Required writing component for CST 231.	UG	LB	Lab

Spring 2008	CST232	232	Comp Nonwest Religions	CST	Comparative Studies	4	An introduction to the academic study of some of the major non-Western religious traditions of the world, examining their historical development, fundamental doctrines and beliefs, practices, institutions, and cultural expressions.	UG	LE	Lecture
Spring 2008	CST232W	232W	Writing in CST 232	CST	Comparative Studies	0	Required writing component for CST 232.	UG	LB	Lab
Spring 2008	CST241	241	Comp Nonwest Cultures	CST	Comparative Studies	4	Examines diversity from an anthropological perspective, utilizing concepts and methods of cultural anthropology. Students will use a holistic approach to analyzing non-Western cultures while gaining understanding of the distinctive research methods of cultural anthropology.	UG	LE	Lecture
Spring 2008	CST241W	241W	Writing in CST 241	CST	Comparative Studies	0	Required writing compnent for CST 241.	UG	LB	Lab
Spring 2008	CST242	242	Comp NW Culture: Music	CST	Comparative Studies	4	Introduction to the music and cultural diversity and uniqueness of selected areas of the globe. This course includes the study of indigenous folk music and instruments of Asia, India, Africa, North America, Central and Southeast Europe.	UG	LE	Lecture
Spring 2008	CST242W	242W	Writing in CST 242	CST	Comparative Studies	0	Required writing component for CST 242.	UG	LB	Lab

Spring 2008	CST243	243	Comp NW Culture: Art	CST	Comparative Studies	4	An introduction to the cultural diversity and uniqueness of selected areas of Asia, Africa, Latin America, and the Middle East as reflected in art.	UG	LE	Lecture
Spring 2008	CST243W	243W	Writing in CST 243	CST	Comparative Studies	0	Required writing component for CST 243.	UG	LB	Lab
Spring 2008	CST251	251	Comp NW Social Systems	CST	Comparative Studies	4	Examination of political processes and economic systems in Asia, Africa, Latin America, and the Middle East with special attention to contemporary issues. Titles vary.	UG	LE	Lecture
Spring 2008	CST251W	251W	Writing in CST 251	CST	Comparative Studies	0	Required writing component for CST 251.	UG	LB	Lab
Spring 2008	CTE400	400	Pre-Serv Wkshp in CTE	CTE	Career and Technical Education	8	For beginning CTE teachers who possesss occupational experience yet have limited or no formal training in an education setting. Candidates will learn teaching pedagogy and skills required for their new role as educators.	UG	LE	Lecture
Spring 2008	CTE410	410	The Learning Environment	CTE	Career and Technical Education	4	This course will focus on examination, discussion, application and reporting of best practices related to instructional strategies. Students will learn techniques that maxmize instructional time, and reflect on the learning environment they provide.	UG	LE	Lecture

Spring 2008	CTE415	415	Clin Praci-Undergrad	CTE	Career and Technical Education	4	Demonstration of proficiencies outlined in the Ohio Performance-Based Teacher Licensure Standards. For teachers that possess business/industry experience and have been hired to teach a Career and Technical Education program area.	UG	LE	Lecture
Spring 2008	CTE420	420	Assessment & Instruction	CTE	Career and Technical Education	4	To improve student achievement, curriculum is prioritized so that teachers may focus on the most important standards. Participants will examine research on prioritizing curriculum, and learn to create a curriculum map and monitor curriculum.	UG	LE	Lecture
Spring 2008	CTE430	430	Prioritize & Map Curric	CTE	Career and Technical Education	4	To improve student achievement, curriculum is prioritized so that teachers may focus on the most important standards. Participants will examine research on prioritizing curriculum, and learn to create a curriculum map and monitor curriculum.	UG	LE	Lecture
Spring 2008	CTE440	440	Overview of CTE	CTE	Career and Technical Education	4	Study of Career and Technical Education, including (but not limited to) Philosophy of CTE; federal legislation; legal issues; special needs, professional and student organizations; current issues in CTE.	UG	LE	Lecture

Spring 2008	CTE450	450	Communica Tech in CTE	CTE	Career and Technical Education	4	Communicating in today's fast-paced, competitive workforce requires understanding of effective communication principles and techniques such as computer technology, e-mail, customer service, documentation, and other contemporary workplace communication issues.	UG	LE	Lecture
Spring 2008	CTE480	480	Occupa Safety in CTE	CTE	Career and Technical Education	4	Promotion of a safe learning and working environment through examination of responsibilities such as safety, liability, documentaiton, OSHA, MSDS, fire safety, minor labor laws, accident prevention, ergonomics and movement, sexual harassment and gender equity.	UG	LE	Lecture
Spring 2008	CTE481	481	Understdg & Tchg At-Risk	CTE	Career and Technical Education	4	When working with students with exceptionalities, there are distinctions in interests, abilities and temperament. These distinctions have implications for teaching and learning so that CTE teachers must rethink how they prepare the educational environment.	UG	LE	Lecture

Spring 2008	CTE611	611	Communication Techniques	CTE	Career and Technical Education	4	Communicating in today's fast-paced, competitive workforce required understanding of effective communication principles and techniques such as computer technology, email, customer service, documentation, and other contemporary workplace communication issues. Bring laptop to class.	GR	LE	Lecture
Spring 2008	CTE621	621	The Learning Environment	CTE	Career and Technical Education	4	This course will focus on examination, discussion, application and reporting of best practices related to instructional strategies. Students will learn techniques that maximize instructional time, and reflect on the learning environment they provide.	GR	LE	Lecture
Spring 2008	CTE631	631	Assessment & Instruction	CTE	Career and Technical Education	4	Curriculum standards determine outcome, assessments chart progress toward the standards, and instruction supports students in completing assignments. Participants will develop assessments that measure achievement so that student evaluation becomes part of the learning process.	GR	LE	Lecture

Spring 2008	CTE651	651	Overview of CTE	CTE	Career and Technical Education	4	Study of Carerr and Technical Education incuding (but not limited to): Philosophy of CTE; federal legislation; legal issues; special needs; professional and student organizations; current issues in CTE.	GR	LE	Lecture
Spring 2008	CTE671	671	Pre-Serv Wkshp in CTE	CTE	Career and Technical Education	8	For beginning CTE teachers who possess occupational experience yet have limited or no formal training in an education setting. Teachers will learn basic teaching skills and knowledge required for their new role as educators.	GR	LE	Lecture
Spring 2008	CTE672	672	Clin Prac I - Grad	CTE	Career and Technical Education	4	Demonstration of proficiencies outlined in the Ohio Performance-Based Teacher Licensure Standards. For teachers that posess business/industry experience and have been hired to teach a Career & Technical Education program area.	GR	LE	Lecture
Spring 2008	CTE673	673	Clin Prac II - Grad	CTE	Career and Technical Education	4	Demonstration of proficiencies outlined in the Ohio Performance-Based Teacher Licensure Standards. For teachers that possess a current Ohio teaching license, baccalaureate degree, business/industry experience and hired to teach Career and Technical Education.	GR	LE	Lecture

Spring 2008	CTE675	675	Priori & Curric	CTE	Career and Technical Education	4	To improve student achievement, curriculum is prioritized so that teachers may focus on the most important standards. Participants will examine research on prioritizing curriculum, learn to create a curriculum map, and monitor curriculum.	GR	LE	Lecture
Spring 2008	CTE680	680	Fundamentals of CBI	CTE	Career and Technical Education	4	Introduction to the basic fundamentals of operating a Career-Based Intervention (CBI) program. Includes information on exceptional learners in terms of development, learning capacities and needs, and also development of strategies for marketing a CBI program.	GR	LE	Lecture
Spring 2008	CTE681	681	Curric and Assmt for CBI	CTE	Career and Technical Education	4	Study of the curriculum and assessment in the operation and planning of a Career-Based Intervention (CBI) program. Includes the coordination of classroom-related instruction with workplace experience and community support.	GR	LE	Lecture
Spring 2008	CTE682	682	Environ Exceptional Sts	CTE	Career and Technical Education	4	Examination of issues related to the teacher's role in the coordination, development and modification of the environment, curriculum and instruction, so that academics and a workplace context for learning maximize students' academic success.	GR	LE	Lecture

Spring 2008	CTE728	728	Seminar in CTE	CTE	Career and Technical Education	4	Examination and discussion of Career & Technical Education, including: Image of CTE; Perkins; maintaining a safe learning environment; legal issues; instructional resources; partnerships; student organizations; students with special needs; technology; service learning; exemplary practices.	GR	SE	Seminar
Spring 2008	CTE730	730	Research in CTE	CTE	Career and Technical Education	4	This course will acquaint CTE master's degree candidates with the purpose and design of research writing, review current and historical research, and provide assistance in developing the master's project.	GR	SE	Seminar
Spring 2008	DAG501	501	DAGSI Registration	DAG	DAGSI	0.5		GR	LE	Lecture
Spring 2008	DAG601	601	DAGSI Registration	DAG	DAGSI	0.5		GR	LE	Lecture
Spring 2008	DAG701	701	DAGSI Registration	DAG	DAGSI	0.5		GR	LE	Lecture
Spring 2008	DAG801	801	DAGSI Registration	DAG	DAGSI	0.5		GR	LE	Lecture
Spring 2008	DAN101	101	Ballet I	DAN	Dance	3	Introduction to vocabulary, techniques, and theories of ballet. Emphasis on body alignment and effective methods for gaining strength and flexibility necessary for proper ballet training.	UG	LB	Lab

Spring 2008	DAN102	102	Ballet I	DAN	Dance	3	Introduction to vocabulary, techniques, and theories of ballet. Emphasis on body alignment and effective methods for gaining strength and flexibility necessary for proper ballet training.	UG	LB	Lab
Spring 2008	DAN103	103	Ballet I	DAN	Dance	3	Introduction to vocabulary, techniques, and theories of ballet. Emphasis on body alignment and effective methods for gaining strength and flexibility necessary for proper ballet training.	UG	LB	Lab
Spring 2008	DAN104	104	Beg Ballet for Music Th	DAN	Dance	2	This beginning level of ballet is geared to the dance needs of students preparing for careers in musical theatre.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN105	105	Beg Ballet for Music Th	DAN	Dance	2	This beginning level of ballet is geared to the dance needs of students preparing for careers in musical theatre.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN106	106	Beg Ballet for Music Th	DAN	Dance	2	This beginning level of ballet is geared to the dance needs of students preparing for careers in musical theatre.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN111	111	Fundamentals of Dance	DAN	Dance	3	Introduction to formalized movement: analysis and practice of action in time and space, use of dynamics, body toning, alignment, flexibility, strength, and coordination.	UG	LB	Lab
Spring 2008	DAN112	112	Fundamentals of Dance	DAN	Dance	3	Introduction to formalized movement: analysis and practice of action in time and space, use of dynamics, body toning, alignment, flexibility, strength, and coordination.	UG	LL	Lecture/Lab Combination

Spring 2008	DAN113	113	Fundamentals of Dance	DAN	Dance	3	Introduction to formalized movement: analysis and practice of action in time and space, use of dynamics, body toning, alignment, flexibility, strength, and coordination.	UG	LB	Lab
Spring 2008	DAN121	121	Begin Jazz Musical Th	DAN	Dance	1	Emphasis on various traditional and contemporary jazz techniques and styles within the realm of musical theatre.	UG	LB	Lab
Spring 2008	DAN122	122	Begin Jazz Musical Th	DAN	Dance	1	Emphasis on various traditional and contemporary jazz techniques and styles within the realm of musical theatre.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN123	123	Begin Jazz Musical Th	DAN	Dance	1	Emphasis on various traditional and contemporary jazz techniques and styles within the realm of musical theatre.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN131	131	Intermediate Jazz I	DAN	Dance	2	First-year intermediate work in jazz dance technique. Emphasis is on technical proficiency and versatility through staccato and lyrical movements. Focus on musicality and individual artistry. Prerequisite: DAN 111 or permission of department.	UG	LB	Lab

Spring 2008	DAN132	132	Intermediate Jazz I	DAN	Dance	2	First-year intermediate work in jazz dance technique. Emphasis is on technical proficiency and versatility through staccato and lyrical movements. Focus on musicality and individual artistry. Prerequisite: DAN 131 or permission of department.	UG	LB	Lab
Spring 2008	DAN133	133	Intermediate Jazz I	DAN	Dance	2	First-year intermediate work in jazz dance technique. Emphasis is on technical proficiency and versatility through staccato and lyrical movements. Focus on musicality and individual artistry.	UG	LB	Lab
Spring 2008	DAN201	201	Ballet II	DAN	Dance	3	Development of the vocabulary, techniques, and theory of ballet. Emphasis on body alignment and flexibility. Prerequisite: DAN 103.	UG	LB	Lab
Spring 2008	DAN202	202	Ballet II	DAN	Dance	3	Development of the vocabulary, techniques, and theory of ballet. Emphasis on body alignment and flexibility. Prerequisite: DAN 201.	UG	LB	Lab
Spring 2008	DAN203	203	Ballet II	DAN	Dance	3	Development of the vocabulary, techniques, and theory of ballet. Emphasis on body alignment and flexibility. Prerequisite: DAN 202.	UG	LB	Lab
Spring 2008	DAN207	207	Beginning Tap Dance	DAN	Dance	1	Beginning level of tap dance introduces students with no pervious experience to the fundamental movements and rhythmic structures of the form.	UG	LB	Lab

Spring 2008	DAN208	208	Beginning Tap Dance	DAN	Dance	1	Beginning level of tap dance introduces students with no pervious experience to the fundamental movements and rhythmic structures of the form.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN209	209	Beginning Tap Dance	DAN	Dance	1	Beginning level of tap dance introduces students with no pervious experience to the fundamental movements and rhythmic structures of the form.	UG	LB	Lab
Spring 2008	DAN211	211	Modern Dance II	DAN	Dance	3	Fundamentals of modern dance: emphasis on skeletal alignment, breathing, relaxation, and the use of dynamics and rhythm in space.	UG	LB	Lab
Spring 2008	DAN212	212	Modern Dance II	DAN	Dance	3	Fundamentals of modern dance: emphasis on skeletal alignment, breathing, relaxation, and the use of dynamics and rhythm in space.	UG	LB	Lab
Spring 2008	DAN213	213	Modern Dance II	DAN	Dance	3	Fundamentals of modern dance: emphasis on skeletal alignment, breathing, relaxation, and the use of dynamics and rhythm in space.	UG	LB	Lab
Spring 2008	DAN214	214	Modern Dance for Actors	DAN	Dance	2	Fundamentals of modern dance. Emphasis on skeletal alignment, breathing, relaxation, and the use of dynamics and rhythm in space. Prerequisite: DAN 113.	UG	LL	Lecture/Lab Combination

Spring 2008	DAN215	215	Modern Dance for Actors	DAN	Dance	2	Fundamentals of modern dance. Emphasis on skeletal alignment, breathing, relaxation, and the use of dynamics and rhythm in space. Prerequisite: DAN 214.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN216	216	Modern Dance for Actors	DAN	Dance	2	Fundamentals of modern dance. Emphasis on skeletal alignment, breathing, relaxation, and the use of dynamics and rhythm in space. Prerequisite: DAN 215.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN231	231	Intermediate Jazz II	DAN	Dance	2	Second-year intermediate work in jazz dance technique. Emphasis on varied allegro and adagio jazz movements. Focus will be on technical diversity, musicality, artistry, and performance. Prerequisite: DAN 133.	UG	LB	Lab
Spring 2008	DAN232	232	Intermediate Jazz II	DAN	Dance	2	Second-year intermediate work in jazz dance technique. Emphasis on varied allegro and adagio jazz movements. Focus will be on technical diversity, musicality, artistry, and performance. Prerequisite: DAN 231.	UG	LB	Lab
Spring 2008	DAN233	233	Intermediate Jazz II	DAN	Dance	2	Second-year intermediate work in jazz dance technique. Emphasis on varied allegro and adagio jazz movements. Focus will be on technical diversity, musicality, artistry, and performance. Prerequisite: DAN 232.	UG	LB	Lab

Spring 2008	DAN251	251	Dance History	DAN	Dance	1	Survey of Western theatrical dance from its roots in early cultures to the twentieth century.	UG	LB	Lab
Spring 2008	DAN252	252	Dance History	DAN	Dance	1	Survey of Western theatrical dance from its roots in early cultures to the twentieth century.	UG	LB	Lab
Spring 2008	DAN253	253	Dance History	DAN	Dance	1	Survey of Western theatrical dance from its roots in early cultures to the twentieth century.	UG	LB	Lab
Spring 2008	DAN253W	253W	Writing in DAN 253	DAN	Dance	0		UG	LB	Lab
Spring 2008	DAN301	301	Ballet III	DAN	Dance	3	Development of the vocabulary, techniques, and theory of ballet. Emphasis on body alignment and flexibility. Prerequisite: DAN 203.	UG	LB	Lab
Spring 2008	DAN302	302	Ballet III	DAN	Dance	3	Development of the vocabulary, techniques, and theory of ballet. Emphasis on body alignment and flexibility. Prerequisite: DAN 301.	UG	LB	Lab
Spring 2008	DAN303	303	Ballet III	DAN	Dance	3	Development of the vocabulary, techniques, and theory of ballet. Emphasis on body alignment and flexibility. Prerequisite: DAN 302.	UG	LB	Lab
Spring 2008	DAN304	304	Intmd Ballet for Mus Thr	DAN	Dance	2	Intermediate level of ballet is geared to the dance needs of students preparing for careers in musical theatre. Emphasis on strong technique which can be applied to theatre dance needs.	UG	LL	Lecture/Lab Combination

Spring 2008	DAN305	305	Intmd Ballet for Mus Thr	DAN	Dance	2	Intermediate level of ballet is geared to the dance needs of students preparing for careers in musical theatre. Emphasis on strong technique which can be applied to theatre dance needs.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN306	306	Intmd Ballet for Mus Thr	DAN	Dance	2	Intermediate level of ballet is geared to the dance needs of students preparing for careers in musical theatre. Emphasis on strong technique which can be applied to theatre dance needs.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN307	307	Intermediate Tap Dance	DAN	Dance	1	Intermediate level tap dance develops a more complex understanding of rhythmic structures in traditional and contemporary approaches to tap technique and choreography.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN308	308	Intermediate Tap Dance	DAN	Dance	1	Intermediate level tap dance develops a more complex understanding of rhythmic structures in traditional and contemporary approaches to tap technique and choreography.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN309	309	Intermediate Tap Dance	DAN	Dance	1	Intermediate level tap dance develops a more complex understanding of rhythmic structures in traditional and contemporary approaches to tap technique and choreography.	UG	LL	Lecture/Lab Combination

Spring 2008	DAN311	311	Modern Dance III	DAN	Dance	3	Further study of modern dance techniques and styles. Material is on the intermediate to advanced level. Prerequisite: DAN 213.	UG	LB	Lab
Spring 2008	DAN312	312	Modern Dance III	DAN	Dance	3	Further study of modern dance techniques and styles. Material is on the intermediate to advanced level. Prerequisite: DAN 311.	UG	LB	Lab
Spring 2008	DAN313	313	Modern Dance III	DAN	Dance	3	Further study of modern dance techniques and styles. Material is on the intermediate to advanced level.	UG	LB	Lab
Spring 2008	DAN321	321	Jazz/Theatre Dance I	DAN	Dance	2	Diversified styles and techniques of contemporary musical theatre dancing. Emphasis is on move-ment proficiency and versatility within the realm of jazz and theatre dance. Prerequisite: DAN 213.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN322	322	Jazz/Theatre Dance I	DAN	Dance	2	Diversified styles and techniques of contemporary musical theatre dancing. Emphasis is on move-ment proficiency and versatility within the realm of jazz and theatre dance. Prerequisite: DAN 321.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN323	323	Jazz/Theatre Dance I	DAN	Dance	2	Diversified styles and techniques of contemporary musical theatre dancing. Emphasis is on move-ment proficiency and versatility within the realm of jazz and theatre dance.	UG	LL	Lecture/Lab Combination

Spring 2008	DAN331	331	Mus Theatre Dance Styles	DAN	Dance	3	Diversified styles and techniques of contemporary musical theatre dancing. Emphasis is on move-ment proficiency and versatility within the realm of jazz and theatre dance.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN332	332	Mus Theatre Dance Styles	DAN	Dance	3	Diversified styles and techniques of contemporary musical theatre dancing. Emphasis is on move-ment proficiency and versatility within the realm of jazz and theatre dance.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN333	333	Mus Theatre Dance Styles	DAN	Dance	3	Diversified styles and techniques of contemporary musical theatre dancing. Emphasis is on move-ment proficiency and versatility within the realm of jazz and theatre dance.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN341	341	Improvisation	DAN	Dance	1	Exploration of improvisation techniques as a compositional tool. For dance majors only. Prerequisite: DAN 213.	UG	LB	Lab
Spring 2008	DAN342	342	Choreography	DAN	Dance	1	Exploration of compositional techniques culminating in the creation of solos and ensemble works. For dance majors only. Prerequisite: DAN 341.	UG	LB	Lab
Spring 2008	DAN343	343	Choreography	DAN	Dance	1	Exploration of compositional techniques culminating in the creation of solos and ensemble works. For dance majors only.	UG	LB	Lab

Spring 2008	DAN371	371	Dance Pedagogy	DAN	Dance	1	Methods for teaching dance using an anatomical approach as the basis for good training in all techniques. For dance majors only. Prerequisite: DAN 252.	UG	LB	Lab
Spring 2008	DAN372	372	Dance Pedagogy	DAN	Dance	1	Methods for teaching dance using an anatomical approach as the basis for good training in all techniques. For dance majors only. Prerequisite: DAN 371.	UG	LB	Lab
Spring 2008	DAN372W	372W	Writing in DAN 372	DAN	Dance	0		UG	LB	Lab
Spring 2008	DAN373	373	Dance Pedagogy	DAN	Dance	1	Methods for teaching dance using an anatomical approach as the basis for good training in all techniques. For dance majors only. Prerequisite: DAN 372.	UG	LB	Lab
Spring 2008	DAN373W	373W	Writing in DAN 373	DAN	Dance	0		UG	LB	Lab
Spring 2008	DAN399	399	Studies Selected Subjects	DAN	Dance	1	Problems, approaches, and topics in the field of dance. Topics vary.	UG	LL	Lecture/Lab Combination
Spring 2008	DAN399W	399W	Writing in DAN 399	DAN	Dance	0		UG	LB	Lab
Spring 2008	DAN401	401	Ballet IV	DAN	Dance	3	Advanced work in classical ballet technique stressing the development of musicality and virtuosity. Pointe work is included. Prerequisite: DAN 303 or departmental approval.	UG	LB	Lab

Spring 2008	DAN402	402	Ballet IV	DAN	Dance	3	Advanced work in classical ballet technique stressing the development of musicality and virtuosity. Pointe work is included. Prerequisite: DAN 401; or departmental approval.	UG	LB	Lab
Spring 2008	DAN403	403	Ballet IV	DAN	Dance	3	Advanced work in classical ballet technique stressing the development of musicality and virtuosity. Pointe work is included.	UG	LB	Lab
Spring 2008	DAN407	407	Advanced Tap Dance	DAN	Dance	1	Advanced level of tap dance emphasizes mastery of complex rhythms, articulation and technical skills in traditional and contemporary approaches to tap dance technique, choreography and Broadway Tap vocabulary.	UG	ST	Studio
Spring 2008	DAN408	408	Advanced Tap Dance	DAN	Dance	1	Advanced level of tap dance emphasizes mastery of more complex rhythms, articulation, and technical skills in traditional and contemporary approaches to tap dance technique, choreography and Jazz Tap vocabulary.	UG	ST	Studio
Spring 2008	DAN409	409	Advanced Tap Dance	DAN	Dance	1	Advanced level of tap dance emphasizes mastery of more complex rhythms, articulation and technical skills in traditional and contemporary approaches to tap dance technique and complex choreography in a Musical Theatre setting.	UG	ST	Studio

Spring 2008	DAN411	411	Modern Dance IV	DAN	Dance	3	Advanced work in modern dance techniques and styles. Prerequisite: DAN 313.	UG	LB	Lab
Spring 2008	DAN412	412	Modern Dance IV	DAN	Dance	3	Advanced work in modern dance techniques and styles. Prerequisite: DAN 411.	UG	LB	Lab
Spring 2008	DAN413	413	Modern Dance IV	DAN	Dance	3	Advanced work in modern dance techniques and styles. Prerequisite: DAN 412.	UG	LB	Lab
Spring 2008	DAN421	421	Jazz/Theatre Dance II	DAN	Dance	2	Diversified styles and techniques of contemporary musical theatre dancing including jazz adagio and allegro combinations, focusing on technique, musicality, style, and performance. Prerequisite: DAN 323.	UG	LB	Lab
Spring 2008	DAN422	422	Jazz/Dance Theatre II	DAN	Dance	2	Diversified styles and techniques of contemporary musical theatre dancing including jazz adagio and allegro combinations, focusing on technique, musicality, style, and performance. Prerequisite: DAN 421.	UG	LB	Lab
Spring 2008	DAN423	423	Jazz/Theatre Dance II	DAN	Dance	2	Diversified styles and techniques of contemporary musical theatre dancing including jazz adagio and allegro combinations, focusing on technique, musicality, style, and performance. Prerequisite: DAN 422.	UG	LB	Lab
Spring 2008	DAN431	431	Pointe Class	DAN	Dance	1	Emphasizes pointe work for the female dancer, to develop strength on pointe for classical ballet. Prerequisite: DAN 203.	UG	LB	Lab

Spring 2008	DAN432	432	Men's Ballet Class	DAN	Dance	1	Specific movements and exercises geared to the male dancer, to develop strength and virtuosity. Prerequisite: DAN 203.	UG	LB	Lab
Spring 2008	DAN433	433	Pas de Deux Class	DAN	Dance	1	Trains male and female dancers in the art of partnering, an essential part of all dance. Prerequisite: DAN 203.	UG	LB	Lab
Spring 2008	DAN491	491	Senior Dance Project	DAN	Dance	1	Advanced work for dance majors in creative projects and/or dance research. Prerequisite: DAN 343; or departmental approval.	UG	LB	Lab
Spring 2008	DAN492	492	Senior Dance Project	DAN	Dance	1	Advanced work for dance majors in creative projects and/or dance research. Prerequisite: DAN 491; or departmental approval.	UG	LB	Lab
Spring 2008	DAN493	493	Senior Dance Project	DAN	Dance	1	Advanced work for dance majors in creative projects and/or dance research.	UG	LB	Lab
Spring 2008	DDT144	144	Blueprint Reading	DDT	Drafting & Design Technology	4	Blueprint reading for mechanical, architectural, electrical, and civil engineering professions. Orthographic and pictorial drawing. Various sketching exercises related to industry standards. Standard symbols and callouts. 3 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	DDT145	145	CAD I	DDT	Drafting & Design Technology	4	Basic concepts of engineering drawing applied to manual and computer-aided drafting. Ortho-graphic projection to produce complete multiview drawings. Computer basics for drawing set-up, construction, and file management. Two hours lecture, four hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	DDT146	146	CAD II	DDT	Drafting & Design Technology	4	TEG 145 continuation. Orthographic projection techniques are expanded to include sectional, auxiliary, and pictorial views. CAD concepts expanded to dimension styles, blocks, x-refs, paper and model space, UCS, and other topics. Two hours lecture, four hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	DDT147	147	CAD III	DDT	Drafting & Design Technology	4	Design concepts apllied to specific topics: threads, cams, weld representations, geometric dimensioning and tolerancing, developments, and descriptive geometry. Student will produce assembly, detail, and pictorial drawings. Two hours lecture, four hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	DDT148	148	Circuit Drafting/CAD	DDT	Drafting & Design Technology	4	Schematic and electrical drafting using Auto CAD software. Stresses use of electrical and electronic symbols, ladder diagrams, schematic wiring diagrams and printed dircuit layouts. Three hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	DDT149	149	Civil Drafting	DDT	Drafting & Design Technology	4	Drafting principles for land, road and bridges. Emphasizes latest software for planning and development. Lecture and demonstration combined with various projects. Covers economic, environmantal and ergonomic issues and standard design procedures. 2 hours lecture/4 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	DDT170	170	Architectural Drawing I	DDT	Drafting & Design Technology	4	Beginning architectural design for residential drawings. Floor plans, elevations, doors and windows, stairs and rails, current building codes, pictorial representation. All drawing done with Architectural Destop Software. 2 hours lecture/4 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	DDT171	171	Architectural Drawing II	DDT	Drafting & Design Technology	4	Advanced architectural drawing emphasizing residential and commercial construction. Continuation of CAD concepts from DDt 170. Special projects include advanced pictorial representation and virtural walkthrough of design. 2 hours lecture/4 hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	DDT204	204	Machine Design	DDT	Drafting & Design Technology	4	Three-dimensional design with solid modeling. Creation of primitives, comlex solids, solid model editing, two-dimensional extraction and extrusion. Production of both engineering and pictorial drawings. Engineering aspects of solid model design. Two hours lecturs, four hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	DEV071	071	Reading Improvement I	DEV	Developmental Education	5	To help severely underprepared students acquire the skills and confidence necessary to reduce the passive chore aspects of reading in order to stimulate an enthusiasm for learning in general. Graded pass/unsatisfactory.	UG	LL	Lecture/Lab Combination
Spring 2008	DEV072	072	Basic Writing Skills I	DEV	Developmental Education	6	Provides intensive instruction for students whose writing skills are significantly below those necessary for success in university-level writing requirements. Graded pass/unsatisfactory.	UG	LL	Lecture/Lab Combination
Spring 2008	DEV073	073	Basic Mathematics I	DEV	Developmental Education	5	Provides instruction in basic mathematical concepts and computations necessary for students to successfully perform mathematical functions that occur in daily life and to complete the Level II course, DEV 083. Graded pass/unsatisfactory.	UG	IS	Independent Study

Spring 2008	DEV081	081	Reading Improvement II	DEV	Developmental Education	5	To help students acquire skills necessary to comprehend a tenth grade textbook; to find the main idea, recognize sentence patterns, deduce meaning of words, and to complete an outside reading assignment. Graded pass/unsatisfactory. (Previously listed SS 081.)	UG	LL	Lecture/Lab Combination
Spring 2008	DEV082	082	Basic Writing Skills II	DEV	Developmental Education	6	To provide learning activities enabling students to brainstorm for ideas; develop and organize their writing; revise; edit for grammar, sentence structure, and mechanics; and prepare standard, acceptable final drafts of their writing. Graded pass/unsatisfactory.	UG	LL	Lecture/Lab Combination
Spring 2008	DEV083	083	Basic Mathematics II	DEV	Developmental Education	5	Reinforces basic mathematical concepts and computations. Provides instruction in pre-algebra and elementary algebra skills and concepts necessary for students to successfully complete elementary algebra. Graded pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	DEV091	091	Reading Improvement III	DEV	Developmental Education	3	Reading and study skills essential for college, emphasizing comprehension, vocabulary, textbook organization, marking, note-taking techniques, and rate improvement. Graded pass/unsatisfactory.	UG	LL	Lecture/Lab Combination

Spring 2008	DEV092	092	Fundamental English Skills	DEV	Developmental Education	4	Prepares students for success in English 101 by giving them instruction and activities in the fundamentals of the writing process. Graded pass/unsatisfactory.	UG	LL	Lecture/Lab Combination
Spring 2008	DEV093	093	Basic Math Skills III	DEV	Developmental Education	3	Available to students who need help in arithmetic functions. Topics include properties of whole numbers, primes and composites, arithmetic operations, decimals, ratios, rates, proportions, percents, and elementary algebra functions. Graded pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	DEV095	095	Elementary Algebra	DEV	Developmental Education	3	Beginning Algebra including: numbers, order of operations, arithmetic laws, evaluation, signed variables, polynomials, factoring, linear equations, isolating variables, lines, systems of linear equations and word problems.	UG	LE	Lecture
Spring 2008	DMV001	001	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV101	101	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV101L	101L	DMV Lab Registration	DMV	DMV Consortium	0		UG	LB	Lab
Spring 2008	DMV102	102	DMV Registration	DMV	DMV Consortium	0.05		UG	LE	Lecture

Spring 2008	DMV103	103	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV104	104	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV105	105	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV201	201	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV201W	201W	Writing in DMV	DMV	DMV Consortium	0		UG	LB	Lab
Spring 2008	DMV202	202	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV203	203	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV204	204	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV205	205	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV301	301	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV302	302	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV303	303	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture

Spring 2008	DMV304	304	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV305	305	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV401	401	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV402	402	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV403	403	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV404	404	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV405	405	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV501	501	DMV Registration	DMV	DMV Consortium	0.5		GR	LE	Lecture
Spring 2008	DMV502	502	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV503	503	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV504	504	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV505	505	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture

Spring 2008	DMV601	601	DMV Registration	DMV	DMV Consortium	0.5		GR	LE	Lecture
Spring 2008	DMV602	602	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV603	603	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV604	604	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV605	605	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV701	701	DMV Registration	DMV	DMV Consortium	0.5		GR	LE	Lecture
Spring 2008	DMV702	702	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV703	703	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV704	704	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DMV705	705	DMV Registration	DMV	DMV Consortium	0.5		UG	LE	Lecture
Spring 2008	DN111	111	Essentials of Danish	DN	Danish	4	Introduction to Danish with an emphasis on speaking the language.	UG	LE	Lecture

Spring 2008	DSS903	903	Issues:Sustaining Renewal-Orgs	DSS	Doct Studies in Sustainability	4	The course will provide doctoral students with exposure to issues relateddd to application of sustainability theory in community, education and post-secondary environments. Practical applications to understand transitional shifts in these agencies will be stressed.	GR	LE	Lecture
Spring 2008	EC200	200	Economic Life	EC	Economics	4	Introduction to basic economic concepts such as resource allocation, costs, supply, demand, and public goods. Topics include American capitalism, market failures, unemployment, inflation, and taxation. The sequence EC 204 and EC 205 (or the equivalent) may be substituted. Credit will not be given for EC 200 Economic Life for students who have already successfully completed EC 204 and EC 205.	UG	LE	Lecture
Spring 2008	EC200W	200W	Writing in EC 200	EC	Economics	0	Required writing component for EC 200.	UG	LB	Lab
Spring 2008	EC204	204	Principle Microeconomics	EC	Economics	4	Fundamental economic principles as an aid in understanding modern society. Introduction to Microeconomics.	UG	LE	Lecture
Spring 2008	EC205	205	Principle Macroeconomics	EC	Economics	4	Fundamental economic principles as an aid in understanding modern society. Introduction to Macroeconomics.	UG	LE	Lecture

Spring 2008	EC205W	205W	Writing in EC 205	EC	Economics	0		UG	LB	Lab
Spring 2008	EC290	290	Econ, Bus, Soc Issues	EC	Economics	4	Analyzes controversy and diversity of opinions regarding economic, business, and social issues shaping the world in which we live. Fosters critical thinking, verbal, and written communication skills through discussion, debate, and writing.	UG	LE	Lecture
Spring 2008	EC290W	290W	Writing in EC 290	EC	Economics	0	Required writing component for EC 290.	UG	LB	Lab
Spring 2008	EC301	301	Money and Banking	EC	Economics	4	Analysis of behavior and significance of money, credit, debt, and the banking system.	UG	LE	Lecture
Spring 2008	EC310	310	The Global Economy	EC	Economics	4	Explores how the global economic environment affects business decisions and how these decisions affect the economy of host and source countries. Analyzes the impact of international trade, foreign direct investment, and global monetary systems.	UG	LE	Lecture
Spring 2008	EC315	315	Intermed Microeconomics	EC	Economics	4	Develops the analytical tools of microeconomics, stressing market behavior of firms, industries, and consumers. Examines the production process and the operation of market mechanisms. Policy implications are emphasized.	UG	LE	Lecture

Spring 2008	EC317	317	Intermed Macroeconomics	EC	Economics	4	Analysis of national economic problems including inflation, unemployment, interest rates, and economic stability. Emphasizes the impact of public policy. This is a writing-intensive course.	UG	LE	Lecture
Spring 2008	EC317W	317W	Writing in EC 317	EC	Economics	0		UG	LB	Lab
Spring 2008	EC319	319	Institutional Economics	EC	Economics	4	Focuses on interrelationships between market and nonmarket forces, exploring contemporary social, technological, political, and other influences on resource allocation decisions and on economic change. This is a writing-intensive course.	UG	LE	Lecture
Spring 2008	EC319W	319W	Writing in EC 319	EC	Economics	0		UG	LB	Lab
Spring 2008	EC321	321	U.S. Economic History	EC	Economics	4	Analysis of economic, political, social, and cultural changes resulting from industrial advancements and the control over industrial changes exercised by different societies.	UG	LE	Lecture
Spring 2008	EC326	326	Econ of Poverty & Discrim	EC	Economics	4	Analysis of economic causes, effects, and cures for poverty and discrimination. Study of trends, economic explanations, and current programs and legislation.	UG	LE	Lecture

Spring 2008	EC330	330	Urban Ec Prob & Prospect	EC	Economics	4	Analysis of economic processes that influence urban economic conditions, population movements, economic problems facing metropolitan areas, and alternative problem-solving techniques.	UG	LE	Lecture
Spring 2008	EC351	351	Labor Markets	EC	Economics	4	A study of labor market behavior and wage determination, addressing the impact of new technologies, global competition, and deindustrialization on American labor markets.	UG	LE	Lecture
Spring 2008	EC352	352	Labor Hst & Legislation	EC	Economics	4	History of the American labor movement from the early national period to the present, including labor legislation, public policy, and current labor issues.	UG	LE	Lecture
Spring 2008	EC370	370	Environmental Economics	EC	Economics	4	Analysis of environmental quality from both microeconomic and systems frameworks. Emphasis on effectiveness of alternative approaches to environmental problems, including specific solutions to particular problems and general approaches to broad problems.	UG	LE	Lecture
Spring 2008	EC401	401	Managerial Economics	EC	Economics	4	Application of economic analysis to management decision making. Practical methods and problems are stressed.	UG	LE	Lecture

Spring 2008	EC402	402	Monetary Economics	EC	Economics	4	Analysis of monetary policy development and the theory of money market behavior. Emphasizes the relationship between money and national economic conditions.	UG	LE	Lecture
Spring 2008	EC409	409	Applied Econometrics	EC	Economics	4	Application of statistics and economic theory to measurement, forecasting, and other economic problems.	UG	LE	Lecture
Spring 2008	EC410	410	Math Methods for Econ	EC	Economics	4	Application of mathematical tools in the formulation of economic theory. Methods used in model construction. Completion of a college algebra course required.	UG	LE	Lecture
Spring 2008	EC412	412	Forecasting Ec Activities	EC	Economics	4	Techniques and theories used in forecasting. Practical methods and problems are stressed.	UG	LE	Lecture
Spring 2008	EC419	419	International Economics	EC	Economics	4	This course covers basic trade theories, commercial policy, and theories of international investment and migration, exchange rate determination and open macroeconomics. Special attention is paid to international economic institutions and current financial crises.	UG	LE	Lecture
Spring 2008	EC420	420	Law and Economics	EC	Economics	4	Economic analysis of the law and legal institutions.	UG	LE	Lecture
Spring 2008	EC425	425	Development of Ec Thought	EC	Economics	4	Historical development of economic thought and philosophies.	UG	LE	Lecture

Spring 2008	EC428	428	Socialist & Radical Economics	EC	Economics	4	Development of Marxian, socialist, and radical economic doctrine with emphasis on contemporary ideas and trends.	UG	LE	Lecture
Spring 2008	EC431	431	Public Finance	EC	Economics	4	Develops a theoretical framework and working knowledge of the economic basis for government activity, government expenditures, programs, and policies, and the financing of government expenditures through taxation.	UG	LE	Lecture
Spring 2008	EC435	435	Comparative Capital Inst	EC	Economics	4	Comparison of institutions of various capitalist and socialist economies including economies in transition. Comparative analysis provides a basis for evaluating government policy.	UG	LE	Lecture
Spring 2008	EC436	436	Industrial Organization	EC	Economics	4	Analysis of business behavior under various industry structures and government policies. Emphasis on actual case studies.	UG	LE	Lecture
Spring 2008	EC440	440	Region Econ Growth & Chng	EC	Economics	4	Regional economic analysis in a policy and planning context. Interdisciplinary approach to analyze the economics of location, inter-regional trade, regional development, urban regions, and growth strategies.	UG	LE	Lecture
Spring 2008	EC441	441	Int'l Trade Theory/Policy	EC	Economics	4	Economic reasons for international trade. Impact of trade and its restrictions on economic aggregates.	UG	LE	Lecture

Spring 2008	EC442	442	Open Economy Macro	EC	Economics	4	Studies international monetary relations and problems. Focuses on institutions and arrangements used to finance international trade. Topics include balance of payments, the dollar and foreign exchange markets, Euro currencies, petrodollars and OPEC, and multinational corporations.	UG	LE	Lecture
Spring 2008	EC444	444	Problems Ec Dev and Trans	EC	Economics	4	Explores theories of economic development and underdevelopment and their relationship to poverty. Develops strategies for reducing world poverty from different perspectives.	UG	LE	Lecture
Spring 2008	EC445	445	Political Econ of Women	EC	Economics	4	Provides feminist understanding of women's economic roles and contributions in the context of globalization. Explores importance of social location - race, gender, class, nationality - in economic processes shaping family life, paid employment, and international market relations.	UG	LE	Lecture

Spring 2008	EC450	450	Econ Info Technology	EC	Economics	4	Study of information technology as an economic resource. Assessment of the economic impacts of information innovation. Applications to network economics, Internet pricing, industrial structure, electronic commerce, and globalization of markets.	UG	LE	Lecture
Spring 2008	EC460	460	Economics of Sports	EC	Economics	4	Applications of economic principles to professional and intercollegiate sports.	UG	LE	Lecture
Spring 2008	EC477	477	Economic Studies	EC	Economics	4	Examination of special economic issues.	UG	LE	Lecture
Spring 2008	EC478	478	Hon: Ind Study Economics	EC	Economics	2	Research in economics for fulfillment of the Honors program project requirement.	UG	IS	Independent Study
Spring 2008	EC480	480	Economic Issues	EC	Economics	4	Examination of selected economic issues with a view to integrating the discipline. Topics vary. For economics majors or permission of instructor.	UG	LE	Lecture
Spring 2008	EC481	481	Independent Reading	EC	Economics	1	Limited to students with extensive backgrounds in economics or allied disciplines and with special reasons for in-depth study in a particular area.	UG	IS	Independent Study
Spring 2008	EC482	482	Independent Reading	EC	Economics	1	Limited to students with extensive backgrounds in economics or allied disciplines and with special reasons for in-depth study in a particular area.	UG	IS	Independent Study

Spring 2008	EC483	483	Independent Reading	EC	Economics	1	Limited to students with extensive backgrounds in economics or allied disciplines and with special reasons for in-depth study in a particular area.	UG	IS	Independent Study
Spring 2008	EC509	509	Statistics for Economics	EC	Economics	4	Elementary statistical concepts for economic applications.	GR	LE	Lecture
Spring 2008	EC510	510	Math for Economics	EC	Economics	4	Algebra and calculus preparation for economics applications.	GR	LE	Lecture
Spring 2008	EC521	521	Grad Surv Prin of Econ	EC	Economics	4	Economics of the individual firm in competitive and monopolistic markets. How prices ration goods and services and the principles on which the total product is divided among the owners of the factors of production.	GR	LE	Lecture
Spring 2008	EC522	522	Grad Surv Prin of Econ	EC	Economics	4	The aggregate economy and how it influences business decisions. The forces that determine the behavior of national income and output, unemployment and the price level. Money, monetary and fiscal policy and growth.	GR	LE	Lecture
Spring 2008	EC602	602	Monetary Economics	EC	Economics	4	Analysis of monetary policy development and the theory of money market behavior. Emphasizes the relationship between money and national economic conditions.	GR	LE	Lecture
Spring 2008	EC610	610	Intro to Math Economics	EC	Economics	4	Application of mathematical tools in the formulation of economic theory. Methods used in model construction.	GR	LE	Lecture

Spring 2008	EC635	635	Comparative Capital Inst	EC	Economics	4	Compares economic institutions of industrialized countries including the newly industrialized countries (NIC's). Addresses such issues as industrial relations, roles of state, methods of corporate finance, and social safety nets.	GR	LE	Lecture
Spring 2008	EC644	644	Prob Ec Dev & Transition	EC	Economics	4	This course explores the problems of economic development in the third world and in economies in transition from socialism. Topics include hunger, unemployment, environmental degradation, privatization, gender, and ethnicity.	GR	LE	Lecture
Spring 2008	EC645	645	Political Econ of Women	EC	Economics	4	Provides feminist understanding of women's economic roles and contributions in the context of globalization. Explores importance of social location - race, gender, class, nationality - in economic processes shaping family life, paid employment, and international market relations.	GR	LE	Lecture
Spring 2008	EC709	709	Applied Econometrics	EC	Economics	4	Application of economic theory, mathematical modeling, and statistics to the measurement and forecasting of economic relationships. Emphasis is on specification, estimation, and hypothesis testing.	GR	LE	Lecture

Spring 2008	EC712	712	Forecast Econ Activities	EC	Economics	4	Techniques and theories used in forecasting. Practical methods and problems are stressed.	GR	LE	Lecture
Spring 2008	EC715	715	Applied Microeconomics	EC	Economics	4	Emphasis on advanced microeconomics applications in consumption/work decisions of households, production/pricing strategies of firms, and public policy toward businesses. Special attention paid to the roles of labor unions/not-for-profit firms.	GR	LE	Lecture
Spring 2008	EC717	717	Applied Macroeconomics	EC	Economics	4	Emphasis is on modern views on fiscal and monetary policy in an open economy. Interrelationships between interest rates, unemployment, economic growth, inflation, and balance of payments are highlighted.	GR	LE	Lecture
Spring 2008	EC719	719	International Economics	EC	Economics	4	This course covers trade theories, commercial policy, and theories of international investment and migration, theories of exchange rate determination and open macroeconomics. Special attention is paid to international economic institutions and current financial crises.	GR	LE	Lecture

Spring 2008	EC722	722	Economics for Managers	EC	Economics	4	Applies economic theory and methods to business and administrative decision making. Prescribes rules for improving managerial decisions. Tells managers how things should be done to achieve organizational objectives efficiently. Also helps managers recognize how macroeconomic forces affect organizations, and describes the economic consequences of managerial behavior. Special attention is paid to the operation of the firm in a global economy.	GR	LE	Lecture
Spring 2008	EC724	724	Develmnt of Ec Thought	EC	Economics	4	Historical development of economic thought and philosophies.	GR	LE	Lecture
Spring 2008	EC725	725	Econ Social & Eco Sys	EC	Economics	4	Economies as subsystems of social systems and ecosystems. Karl Polanyi's and Douglass North's analyses of institutions and feedbacks between economy and culture. Human ecology and ecological economics perspectives on feedbacks between economy and ecology.	GR	LE	Lecture

Spring 2008	EC726	726	Contemp Political Econ	EC	Economics	4	A political, social and economic analysis that questions, critiques, and provides alternative perspectives to orthodox economic theory. Studies groups, their systematic interrelations, and their impact on political, economic and social structures, practices, and outcomes.	GR	LE	Lecture
Spring 2008	EC728	728	Economics of Innovation	EC	Economics	4		GR	LE	Lecture
Spring 2008	EC730	730	Regional & Urban Econ	EC	Economics	4	Analysis of the basic forces that shape the economic, social, and physical environments of urban and nonurban regions. Emphasis on regional income determination and developmental models, location of economic activity, the structure of urban centers, intra-urban economic relationships, and economic policy.	GR	LE	Lecture
Spring 2008	EC731	731	Economics Public Finance	EC	Economics	4	Develops a theoretical framework and working knowledge of the economic basis for government activities, government expenditures, programs, and policies, and the financing of government expenditures through taxation.	GR	LE	Lecture

Spring 2008	EC740	740	Cost-Benefit Analysis	EC	Economics	4	Measurement of benefits and costs of both public and private projects with significant public implications. Includes conceptual issues and focuses on practical application, including specific cost-benefit studies.	GR	LE	Lecture
Spring 2008	EC755	755	Ec of Health & Health Pol	EC	Economics	4	Teaches students how alternative incentive systems and resource allocations affect the health services sector. Emphasis on current institutional arrangements, empirical studies, and policy alternatives.	GR	LE	Lecture
Spring 2008	EC765	765	Labor Mkt Theory & Policy	EC	Economics	4	Blends theoretical analyses of the forces affecting labor market processes with empirical investigation of labor market conditions and analyses of existing and proposed labor market programs and policies.	GR	LE	Lecture
Spring 2008	EC777	777	Economic Studies	EC	Economics	4	An examination of special issues.	GR	LE	Lecture

Spring 2008	EC780	780	Ec Problems Seminar	EC	Economics	4	Titles vary. Six hours of seminar must be selected from the following topics: economics of the workforce; regional and urban problems; environmental issues; technological change; economic development; economics of poverty; and income maintenance. Completion of introductory statistics course or equivalent 600-level survey course required.	GR	SE	Seminar
Spring 2008	EC781	781	Reserach in Economics	EC	Economics	2	Titles vary. Intensive reading or research in selected fields of advanced economics.	GR	IS	Independent Study
Spring 2008	EC782	782	Research in Economics	EC	Economics	2	Intensive reading or research in selected fields of economics.	GR	IS	Independent Study
Spring 2008	EC783	783	Research in Economics	EC	Economics	2	Intensive reading or research in selected fields of economics.	GR	IS	Independent Study
Spring 2008	EC785	785	Internship	EC	Economics	4	Titles vary. One-quarter internship working in a selected private, social, or governmental organization under the direction of a faculty advisor and work supervisor. Graded pass/unsatisfactory.	GR	IN	Internship
Spring 2008	EC789	789	Continuing Registration	EC	Economics	1		GR	LE	Lecture
Spring 2008	ECO391	391	Economic Studies	ECO	Center for Economic Educ.	1	Selected economic education issues and topics and techniques for teaching them in the K-12 classroom.	UG	LE	Lecture

Spring 2008	ECO500	500	Consumer ECO: K-12 Teacher	ECO	Center for Economic Educ.	3	An examination of consumers as they participate in the economy. Emphasis on those householder roles (consumer/producer/citizen) that are teachable in the K-12 classroom. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	ECO511	511	Prin of Econ Tchrs I	ECO	Center for Economic Educ.	3	Basic microeconomic principles for K-12 teachers. Participants study the tools of analysis and operations of the parts of the economy. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	ECO512	512	Prin of Econ for Tchrs II	ECO	Center for Economic Educ.	3	Survey of basic macroeconomic principles for K-12 teachers. Participants study the tools of analysis and operations of the whole economy. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	ECO513	513	Prin of Econ for Tchrs II	ECO	Center for Economic Educ.	3	Survey of advanced micro and macroeconomic principles for K-12 teachers. Participants will study the tools of analysis and operations of the parts and the whole of the economy.	GR	LE	Lecture
Spring 2008	ECO514	514	Economics in Action	ECO	Center for Economic Educ.	1	Selected economic issues and topics for teachers, presented in dialogue with visiting resource persons. Titles vary. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture

Spring 2008	ECO515	515	Teach Materials & Methods	ECO	Center for Economic Educ.	3	Economic education materials and methods for the K-12 classroom. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	ECO516	516	Econ Studies for Teachers	ECO	Center for Economic Educ.	1	Selected economic issues and topics and techniques for teaching them in the K-12 classroom. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	ECO517	517	Eco Applica Internet I	ECO	Center for Economic Educ.	2	Course teaches basic economic skills and application of these skills to K-12 teachers. Work is assigned via the Internet. Covers standards one through nine of the voluntary national content standards in economics. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	ECO518	518	Eco Applica Internet II	ECO	Center for Economic Educ.	2	Course teaches basic economic skills and application of these skills to K-12 teachers. Work is assigned via the Internet. Covers standards ten through twenty of the voluntary national content standards in economics. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	ECO523	523	Family Financial Security	ECO	Center for Economic Educ.	3	Financial planning and the family, with emphasis on aspects teachable in the K-12 classroom. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture

Spring 2008	ECO550	550	Teach Econ Use Child Lit	ECO	Center for Economic Educ.	3	This course is designed to help teachers with little economic education learn how to teach economics using children's literature. Topics include scarcity, decision making, marginal cost/benefit, role of incentives, trade, money and entrepreneurship.	GR	LE	Lecture
Spring 2008	ECO552	552	Entrprnshp Basiscs Teach	ECO	Center for Economic Educ.	3	K-12 teachers are provided with a basic foundation to teach entrepreneurship; it is designed for teachers with minimal requisite knowledge of economics, business and entrepreneurship. Topics include business plans, investing, picking the right business and others.	GR	LE	Lecture
Spring 2008	ECO569	569	Insurance Basics Teachrs	ECO	Center for Economic Educ.	3	This course is designed for teachers with minimal knowledge of insurance principals and to provide middle and high school teachers with sufficient knowledge to teach basic property and casulty insurance principals. Topics include property damage, home owners insurance, and term life insurance.	GR	LE	Lecture

Spring 2008	ECO570	570	Persnl Finance Ed Teach	ECO	Center for Economic Educ.	3	This course is designed to help teachers with little economic and financial literacy education discover resources and techniques available to teach children in grades 6-12. Topics include scarcity, decision making, budgeting, banking, credit, investing, and insurance.	GR	LE	Lecture
Spring 2008	ECO728	728	Curr & Mat in Econ Ed	ECO	Center for Economic Educ.	3	Analysis of teaching materials available in economics education, with emphasis on curriculum and teaching unit development.	GR	LE	Lecture
Spring 2008	ED101	101	Interpers Proc Learn Lab	ED	Education	1	Explores such areas as listening, communicating, life planning, sexuality, and the helping relation-ship with emphasis on interpersonal process.	UG	LL	Lecture/Lab Combination
Spring 2008	ED210	210	Education in a Democracy	ED	Education	4	This course explores the role and relationship of education in a democracy to concepts of civil society, social justice, access to knowledge, and development of democratic character in the young.	UG	LE	Lecture
Spring 2008	ED210W	210W	Writing in ED 210	ED	Education	0	Required writing component for ED 210.	UG	LB	Lab
Spring 2008	ED221	221	Practicum Experience I	ED	Education	1	Field practicum introduces students to the educational process through participation in a classroom and through an examination of dynamics of the classroom and its setting.	UG	PR	Practicum

Spring 2008	ED223	223	Practicum Experience II	ED	Education	1	Field practicum introduces students to the educational process through participation in a classroom and through an examination of dynamics of the classroom and its setting.	UG	PR	Practicum
Spring 2008	ED301	301	Sch Pluralistic Soc:	ED	Education	5	Designed to provide professional educators an orientation to the teaching profession and pluralistic American society as well as an awareness of the total global community.	UG	LE	Lecture
Spring 2008	ED301W	301W	Writing in ED 301	ED	Education	0	Required writing component for ED 301.	UG	LB	Lab
Spring 2008	ED303	303	Intro to Ed Psychology:	ED	Education	5	Cognitive, affective, and psychomotor domains of learning, basic principles and stages of child and adolescent development, and special topics within the social contexts education. The role of research in supporting educational practice.	UG	LE	Lecture
Spring 2008	ED303W	303W	Writing in ED 303	ED	Education	0	Required writing component for ED 303.	UG	LB	Lab
Spring 2008	ED311	311	EC Science: Cur & Mat	ED	Education	4	Philosophy, curriculum, and materials for teaching early childhood school science; emphasis on planning and implementation, evaluation, resources and facilities, and current and historical curricular trends in early childhood school science. Field/clinical experience required.	UG	LL	Lecture/Lab Combination

Spring 2008	ED316	316	EC Land Arts: Cur & Mat	ED	Education	4.5	Study of emerging literacy in early childhood methods and materials to facilitate oral and written communication. Integration of language art across K-3 grade curricula. Modifications and intervention to meet individual needs.	UG	LE	Lecture
Spring 2008	ED316W	316W	Writing in ED 316	ED	Education	0	Required writing component for ED 316.	UG	LB	Lab
Spring 2008	ED317	317	EC Reading: Cur & Mat	ED	Education	4.5	Resources and procedures for pre-reading, reading readiness, and formal reading instruction. Integration of reading/language arts across the K-3rd grade curricula. Modifications and interventions to meet individual needs.	UG	LE	Lecture
Spring 2008	ED321	321	Practicum Experience III	ED	Education	1	Third field/clinical practicum where students implement teaching strategies introduced in the Phase II methods components. Involvement with human service agencies and families occurs.	UG	PR	Practicum
Spring 2008	ED323	323	Practicum Experience IV	ED	Education	1	Fourth field/clinical practicum where students implement teaching strategies introduced in the Phase II methods components. Involvement with human service agencies and families occurs.	UG	PR	Practicum

Spring 2008	ED327	327	Teaching Skills	ED	Education	3	Introduces students to the basic skills of lesson planning and presentation. Students use motiva-tional techniques, questioning skills, alternative teaching strategies, and varied advanced technologies, to design/deliver instructional plans.	UG	LL	Lecture/Lab Combination
Spring 2008	ED370	370	Ind Reading&Minor Prob	ED	Education	1	Planned reading and/or project under the guidance of a faculty member of the College of Education and Human Services.	UG	IS	Independent Study
Spring 2008	ED400	400	Education Honors Research	ED	Education	1	In-depth independent study under the guidance of a faculty advisor.	UG	IS	Independent Study
Spring 2008	ED407	407	Instr in Word Study:Phon	ED	Education	4.5	This course is an in-depth analysis of how people learn printed words related to instructional procedures in schools.	UG	LL	Lecture/Lab Combination
Spring 2008	ED411	411	EC Math:Phil/Curric & Mat	ED	Education	4	Curriculum and materials for teaching mathematics to Pre K-3 children based on NCTM Standards and Ohio Academic Mathematics Standards, benchmarks and indicators, Integration of mathematics across the curriculum. Modifications and interventions to meet diverse needs.	UG	LL	Lecture/Lab Combination

Spring 2008	ED415	415	Planning the Reading Prog	ED	Education	4.5	Developing a classroom reading program based on an understanding of the reading process, goals, assessment strategies, materials, and instructional strategies. Includes strategies for supporting students with volunteer and/or paraprofessional personnel.	UG	LE	Lecture
Spring 2008	ED417	417	EC Soc Study: Curr & Mat	ED	Education	4	Objectives, principles, and trends of social studies in Early Childhood Education with a focus on integrating technology into social studies. Field experience required.	UG	LL	Lecture/Lab Combination

Spring 2008	ED419	419	Superv Tchg Elem	ED	Educatio n	4	public school full time, work under direct supervision of an experienced classroom teacher. In the fall, student teaching begins in late August to early September with the opening of the public school and continues for approximately 14 weeks to the end of fall quarter. During winter quarter, the period of student teaching corresponds with the academic quarter dates. During spring quarter, student teaching begins on the Monday of the university's spring break and continues to the end of the quarter with time off according to the public school's calendar for its spring break. Students may receive 12 credit hours for student teaching in the fall and 10 credit hours for winter and spring quarters. There is no student teaching during the summer. Formal application must be made through the Office of the Director of laboratory experi-ences according to the following schedule: for fall quarter, apply	UG	IN	Internship
Spring 2008	ED421	421	Lit for Middle Childhood	ED	Educatio n	3	Knowledge of a wide range of literature for middle childhood including the selection criteria and the rationale for classroom practices with children's literature.	UG	LE	Lecture

Spring 2008	ED421W	421W	Writing in ED 421	ED	Education	0	Required writing component for ED 421.	UG	LB	Lab
Spring 2008	ED429	429	Supv Teaching: Multi-Age	ED	Education	4	Supervised full-time student teaching in a pre-K-12, multi-age school setting.	UG	IN	Internship
Spring 2008	ED432	432	Improv Reading Sec School	ED	Education	5	Techniques of diagnosing and correcting reading problems of secondary students. Explores secondary reading problems with emphasis on skill development.	UG	LL	Lecture/Lab Combination
Spring 2008	ED440	440	Teacher in School/Society	ED	Education	1	An exit seminar preparing the student to enter the profession via consideration of societal issues affecting education and personal readiness through individual development of a product portfolio.	UG	SE	Seminar
Spring 2008	ED440W	440W	Writing in ED 440	ED	Education	0	Required writing component for ED 440.	UG	LB	Lab
Spring 2008	ED458	458	Practicum in Education	ED	Education	1	Supervised teaching experience for students who have completed student teaching (or its equivalent) and are seeking certification in another field. Topics vary.	UG	PR	Practicum
Spring 2008	ED460	460	Practicum in English Ed	ED	Education	1	Students are assigned to an instructional class that focuses on the teaching of English to speakers of other languages (TESOL) for a supervised practicum experience. Graded pass/unsatisfactory.	UG	IS	Independent Study

Spring 2008	ED470	470	Curric & Instruct Wrkshp	ED	Education	1	Intensive study of a selected area of the school curriculum to meet the particular needs of the participating preservice and in-service teachers, administrators, and curriculum supervisors. Topics vary.	UG	LE	Lecture
Spring 2008	ED470W	470W	Writing in ED 470	ED	Education	0		UG	LB	Lab
Spring 2008	ED600	600	Classroom Management:	ED	Education	4	An application of a variety of discipline models for use in diverse settings and discussion of recent research, practice, and innovation in the field of classroom management, addressing adolescence concerns.	GR	LE	Lecture
Spring 2008	ED602	602	Ed in a Plural Soc:	ED	Education	4	Introduces students to foundational analysis of the relationship between public education in a democracy and the critical social issues and forces impacting renewal efforts.	GR	LE	Lecture
Spring 2008	ED603	603	Child Development	ED	Education	4	The educational implications of physical, social, emotional, linguistic, and intellectual characteristics of children who are developing typically or atypically from conception through the primary years, including the effects of culture, ethnicity, family and community.	GR	LE	Lecture

Spring 2008	ED604	604	Adolescent Development	ED	Education	5	An examination of the period in the sequence of human development known as adolescence, with particular attention to psychological, social, and physical development.	GR	LE	Lecture
Spring 2008	ED605	605	Current Tendencies in Ed	ED	Education	1	Current trends and theories in education, and the development of criteria and procedures for their evaluation and implementation.	GR	LE	Lecture
Spring 2008	ED606	606	Reading and Literacy I	ED	Education	4.5		GR	LE	Lecture
Spring 2008	ED607	607	Reading and Literacy II	ED	Education	4.5	Course extends student knowledge of literacy instruction and addresses more advanced levels of literacy including textbook study and research. Students are expected to carry out instructional procedures within their internship classrooms and to be associate instructors to the teachers in the areas of oral language, children's literature, reading, and writing.	GR	LE	Lecture
Spring 2008	ED610	610	MC: Curriculum & Methods	ED	Education	4	A study of curriculum, materials, and methodology for teaching mathematics in the middle school, grades 4 through 9.	GR	LL	Lecture/Lab Combination

Spring 2008	ED612	612	Practicum I:	ED	Education	1	The first PEP field practicum provides an opportunity to work in a K-12 school and human service agency in order to initiate the task of applying theory to practice. Graded pass/unsatisfactory.	GR	PR	Practicum
Spring 2008	ED614	614	Practicum II:	ED	Education	1	The second PEP field practicum provides involvement in a K-12 school and/or a human service agency setting as a laboratory. Introduction to family collaboration occurs. Graded pass/unsatisfactory.	GR	PR	Practicum
Spring 2008	ED615	615	Literacy Instr: Disability	ED	Education	5	Intended for Intervention Specialists. Provides knowledge and skills for literacy instruction for students with disabilities from emergent reading through proficient reading levels.	GR	LE	Lecture
Spring 2008	ED616	616	Practicum III:	ED	Education	1	The third field practicum provided in the PEP promotes understanding of the total ecology of schooling collaboration with families. A human service agency setting is highlighted. Graded pass/unsatisfactory.	GR	PR	Practicum

Spring 2008	ED620	620	Studies in English Educ	ED	Education	2	(Also listed as ENG 685.) Focuses on theoretical issues and practical problems of teaching English at all levels, including the teaching of writing and the teaching of English to speakers of other languages (TESOL). May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	ED621	621	Human Develop & Learning	ED	Education	4	Apply basic research techniques and method to the study of human development, learning growth, and achievement. Engage in observational analysis of children in the classroom setting, putting theory into practice.	GR	LL	Lecture/Lab Combination
Spring 2008	ED622	622	Inst Tech and Integ Meth	ED	Education	3	Involves students in a spectrum of instructional technologies, techniques, and approaches appropriate for today's complex classroom. Students will utilize and integrate curriculum content with multi-media applications.	GR	LL	Lecture/Lab Combination
Spring 2008	ED623	623	Adoloescence English:	ED	Education	4	Provides developing professional educators with an introduction to the teaching/learning of middle childhood/adolescence language arts.	GR	LL	Lecture/Lab Combination
Spring 2008	ED624	624	MC Lit., Speech & Drama	ED	Education	4	Emphasize the integration of speech, drama, and age-appropriate children's literature to plan activities in the language arts.	GR	LL	Lecture/Lab Combination

Spring 2008	ED625	625	Mod Foreign Lang Cur&Mat	ED	Education	4	Presents foreign language curriculum with emphasis on standards. Focus on Pre K-5 first and second language acquisition. Emphasis on technology and assessment.	GR	LL	Lecture/Lab Combination
Spring 2008	ED626	626	Sci Teach Inclusive Clas	ED	Education	3	Issues and strategies for teachers of inquiry-based science to effectively meet the needs of a diverse student population. A special emphasis is given to the needs of students with physical and learning disabilities.	GR	LL	Lecture/Lab Combination
Spring 2008	ED627	627	Eur Lang: Chld Lit,Mus,Art	ED	Education	4	Integration of children's literature, music, and art with emphasis on selection and use of books and related activities in grades K-12. Emphasis will be on technology and assessment. Note: Literature may be read in translation with the instructor approval.	GR	LL	Lecture/Lab Combination
Spring 2008	ED629	629	Middle School Soc Studies	ED	Education	4	Course focuses on principles, trends, resources, technology, critical thinking skills, historiography, and social science research for middle school social studies. This course will also focus on teaching in the multicultural classroom.	GR	LL	Lecture/Lab Combination

Spring 2008	ED631	631	Lit Skills Thru Adolscen	ED	Education	5	Course provides the content area for secondary teachers with reading and writing strategies to help solve the problems encountered in grades 7-12. Reading comprehension is a key element in solving the many problems of classrooms that stress content. Writing skills and strategies are taught to help students communicate more effectively in all content areas.	GR	LE	Lecture
Spring 2008	ED632	632	Improv Read Sec Schools	ED	Education	3	Surveys the teaching of reading in American secondary schools including the skills necessary to teach reading in the content subjects. Not open to reading majors.	GR	LE	Lecture
Spring 2008	ED635	635	Sec Issues & Leadership	ED	Education	3	An examination of major trends and issues facing those who work with adolescents in the education system. Such elements as school organization, curriculum, assessment, funding, and instruction are included.	GR	LE	Lecture

Spring 2008	ED636	636	Mid Child Level Sci Mthds	ED	Education	4	Curriculum and materials for teaching middle level science with emphasis on using an integrated constructivist approach to science teaching. Includes development of appropriate objectives, planning, resources and facilities, evaluation, and curricular trends in science education.	GR	LL	Lecture/Lab Combination
Spring 2008	ED637	637	AYA Math Methods Part I	ED	Education	4	Curriculum, methods and materials in the mathematics of grades 7 through 12, part I.	GR	LL	Lecture/Lab Combination
Spring 2008	ED638	638	AYA Math Methods Part II	ED	Education	4	Curriculum, methods and materials in the mathematics of grades 7 through 12, Part II.	GR	LL	Lecture/Lab Combination
Spring 2008	ED639	639	Adolescence Soc Studies	ED	Education	4	Provides developing professional educators instruction in objectives, principles, and trends in middle childhood/adolescence social studies.	GR	LL	Lecture/Lab Combination
Spring 2008	ED641	641	Internsp/Sem: Middle Child	ED	Education	6	Interns are assigned to a middle childhood public school full-time for lead teaching under the direct supervision of an experienced classroom teacher. Includes weekly seminar.	GR	IN	Internship

Spring 2008	ED645	645	Standards Based Assessmnt	ED	Education	4	This course provides developing professional educators an overview of authentic assessment of the student and by the student. Students will complete a professional electronic portfolio. The portfolio will be aligned with the PRAXIS domains.	GR	LL	Lecture/Lab Combination
Spring 2008	ED646	646	Action Research Capstone	ED	Education	4	Each student will complete data analysis and write a formal 5-chapter report of a completed action research project.	GR	IS	Independent Study
Spring 2008	ED647	647	Tchg in the Public School	ED	Education	4	Study, observation, and evaluation of practices. Offered only to students who have completed the pertinent curriculum and materials course and are seeking a waiver of all or part of student teaching on the basis of full-time teaching experience.	GR	IN	Internship
Spring 2008	ED648	648	Improve Soc Studies Instr	ED	Education	4	In-depth analysis of social studies resource materials and curricular models with a focus on integrating technology into social studies.	GR	LE	Lecture
Spring 2008	ED651	651	Internship/Seminar: Adoles	ED	Education	6	Interns are assigned to a 7-12 school full-time for lead teaching under the direct supervision of an experienced classroom teacher. Includes seminar.	GR	IN	Internship

Spring 2008	ED658	658	Practicum in Education	ED	Education	1	Supervised teaching experience for students who have completed student teaching or its equivalent and are seeking certification in another field. Titles vary.	GR	PR	Practicum
Spring 2008	ED660	660	Practicum in English Ed	ED	Education	1	Students are assigned to an instructional class that focuses on the teaching of English to speakers of other languages (TESOL) for supervised practicum experience.	GR	PR	Practicum
Spring 2008	ED661	661	Intern/Sem: Multi-Age	ED	Education	6	Students are assigned to a PK-12 school full-time for lead teaching under the direct supervision of an experienced classroom teacher. Includes seminar.	GR	IN	Internship
Spring 2008	ED664	664	Evaluation	ED	Education	3	Evaluation of learning, including selected forms of measurement and interpretation of data: sociometric techniques, anecdotal records, and testing.	GR	LE	Lecture
Spring 2008	ED665	665	Supervised Teaching Elem	ED	Education	6	Students are assigned to a school full time for teaching under the direct supervision of an experience classroom teacher. Includes seminar.	GR	IN	Internship
Spring 2008	ED667	667	Supervised Teaching Sec	ED	Education	6	Students are assigned to a school full time for teaching under the direct supervision of an experienced classroom teacher. Includes seminar.	GR	IN	Internship

Spring 2008	ED670	670	Curric & Instruct Wrkshp	ED	Education	1	Intensive study of a selected area of the school curriculum designed to meet the particular needs of the participating preservice and in-service teachers, administrators, and curriculum supervisors. Titles vary.	GR	LL	Lecture/Lab Combination
Spring 2008	ED700	700	Adv Stu Sem I: Intro	ED	Education	2	Introductory class required of students beginning Classroom Teacher: Advanced Studies to design a Program of Study (POS) and become familiar with program goals, timelines, comprehensive exam, portfolio and capstone project requirements.	GR	SE	Seminar
Spring 2008	ED701	701	Advanced Educ Psychology	ED	Education	3	Selected theories of learning and the relationship between the theories and instructional practice.	GR	LE	Lecture
Spring 2008	ED704	704	Inqry Into Fndtns of Ed	ED	Education	4	The past and present social, philosophical, and psychological trends and issues in education in a democratic society.	GR	LE	Lecture
Spring 2008	ED709	709	Diag/Assemnt Read Perform	ED	Education	4.5	This course will prepare teachers to recognize variations of reading and writing performance in a classroom and clinical setting. Teachers will learn a range of assessment instruments with which to assess their students.	GR	LL	Lecture/Lab Combination

Spring 2008	ED710	710	Tch Strat Cult Divrs Set	ED	Education	4	Focuses on curricula, materials, strategies, and techniques for instructing learners with cultural, social, economic, and intellectual differences.	GR	LE	Lecture
Spring 2008	ED714	714	Inquiry & Assessment-MC	ED	Education	4	This course provides and overview of research methods, assessment, and descriptive statistics. Students also develop a research proposal.	GR	LL	Lecture/Lab Combination
Spring 2008	ED715	715	Action Res Meth-Teachers	ED	Education	4	Action research methods for teachers are studied and practiced through a field-based pilot study.	GR	LL	Lecture/Lab Combination
Spring 2008	ED716	716	Foundtn of Reading Instr	ED	Education	3	Development of effective reading instruction based on children's language acquisition and development.	GR	LE	Lecture
Spring 2008	ED717	717	Word Study: Phonics	ED	Education	5	In-depth analysis of how people learn printed words related to instructional procedures in schools. Students will apply knowledge in a tutoring situation.	GR	LL	Lecture/Lab Combination
Spring 2008	ED721	721	Lit for Elem Children	ED	Education	3	Extension and enrichment of knowledge of children's books. Introduction to research and scholarly and critical writing about children's literature in relation to classroom practices. Application of research and criticism ideas; exploration of internationalism in children's literature.	GR	LE	Lecture

Spring 2008	ED731	731	Adol/Young Adult Science	ED	Education	4	Methods, curriculum, and materials for teaching adolescent school science: emphasis on philosophy, planning and implementation, evaluation, resources and facilities, and historical and contemporary curricular trends in science education.	GR	LL	Lecture/Lab Combination
Spring 2008	ED732	732	Prin and Pract of Mid Sch	ED	Education	4	The historical and underlying philosophy of the middle school concept based on the nature of the students. Current and future instructional and curricular practices are viewed in relation to this philosophy.	GR	LE	Lecture
Spring 2008	ED746	746	Sci,Tech,Soc as Tch Imper	ED	Education	4	Curriculum and materials concerned with issues that interface science, technology, and society (STS) now and in the future. Clinical experiences, approaches to teaching, the professional literature, and resources and facilities are emphasized.	GR	LE	Lecture
Spring 2008	ED755	755	Research Projects	ED	Education	1	For those students who wish to conduct individual, action-oriented research for the completion of their degree program. The student will work with a committee in the completion of the project.	GR	IS	Independent Study

Spring 2008	ED769	769	Content Reading Instr	ED	Education	3	Identifies differences between fiction and non-fiction reading. Provides a general model for content reading lessons and a wide range of activities for involving students in content learning. Includes attention to vocabulary/concept development and critical reading.	GR	LE	Lecture
Spring 2008	ED770	770	Ind Reading & Minor Prob	ED	Education	1	Planned reading and/or project under the guidance of a College of Education and Human Services faculty member.	GR	IS	Independent Study
Spring 2008	ED771	771	Inquiry Project	ED	Education	1	Individual research to satisfy requirements of inquiry project for the Master of Education Degree.	GR	IS	Independent Study
Spring 2008	ED799	799	Adv Stu Sem II: Trans	ED	Education	3	Course required of continuing students in Classroom Teacher: Advanced Studies to review and assess progress toward program completion through external review, portfolio check, comprehensive exam and proposal for capstone project.	GR	SE	Seminar
Spring 2008	ED810	810	Proj/Seminar CT: Reading	ED	Education	3	The project and seminar is the capstone of each individually tailored program that requires students to assimilate the results of particular investigations related to reading/literacy.	GR	SE	Seminar

Spring 2008	ED815	815	Teach Children to Write	ED	Education	3	Advanced study in current research theories and process of teaching writing in the elementary schools.	GR	LE	Lecture
Spring 2008	ED820	820	Adv Studies: Sem III: Cap	ED	Education	3	Culminating course required of students completing Classroom Teacher: Advanced Studies including impact on student learning, exit portfolio and culminating project.	GR	SE	Seminar
Spring 2008	ED899	899	Thesis	ED	Education	1	Work with an advisor to complete a thesis.	GR	IS	Independent Study
Spring 2008	EDE200	200	Entrance Seminar: ECE	EDE	Education_Early Childhood	2	Seminar introducing students to the requirements of the Early Childhood Education Licensure Program and the knowledge, skills, and dispositions required as a teacher candidate in the Early Childhood Program. Entrance Seminar: Early Childhood Education	UG	SE	Seminar
Spring 2008	EDE221	221	Practicum Exp I: ECE	EDE	Education_Early Childhood	1	Preschool placement for students age 3-5.	UG	PR	Practicum
Spring 2008	EDE223	223	Practicum Exp II:ECE	EDE	Education_Early Childhood	1	Practicum placement in a K-grade 3 setting.	UG	PR	Practicum
Spring 2008	EDE225	225	Practicum Exp III:ECE	EDE	Education_Early Childhood	1	Practicum placement in a k-grade 3 setting.	UG	PR	Practicum

Spring 2008	EDE230W	230W	Writing in EDE 230	EDE	Education_Early Childhood	0	Required writing component for EDE 230.	UG	LB	Lab
Spring 2008	EDE301	301	H.G. & Dev:Pre-Nat Ec	EDE	Education_Early Childhood	4	This course addresses the philosophies of physical, cognitive, linguistic, social and emotional typical and atypical development of children prenatal through age eight.	UG	LE	Lecture
Spring 2008	EDE302	302	Child Guidance: ECE	EDE	Education_Early Childhood	4	The study of using positive child guidance strategies to facilitate learning and promote social well-being in early childhood settings.	UG	LE	Lecture
Spring 2008	EDE304	304	Principles & Practices: ECE	EDE	Education_Early Childhood	4	Culturally responsive, developmentally and age appropriate practices based on a framework of theoretical research, currently early childhood pedagogy (birth-age 8) and alignment to state and nationaly early childhood guidelines.	UG	LE	Lecture
Spring 2008	EDE305	305	Human Dev: Prenatal - EC	EDE	Education_Early Childhood	4	This course addresses the physical, cognitive, language, social and emotional typical and atypical development of children prenatal through age eight. Field experience required.	UG	LE	Lecture

Spring 2008	EDE318	318	Teach Diverse Lrnrs ECE	EDE	Education_Early Childhood	4	Course examines making modifications and using various teaching strategies to facilitate the diverse learning needs of young students. Focuses on developing and implementing differentiated lessons.	UG	LE	Lecture
Spring 2008	EDE321	321	Practicum Exp IV: ECE	EDE	Education_Early Childhood	1	Practicum placement in a K-grade 3 setting.	UG	PR	Practicum
Spring 2008	EDE323	323	Practicum Exp V: ECE	EDE	Education_Early Childhood	1	Practicum placement in a K-grade 3 setting.	UG	PR	Practicum
Spring 2008	EDE401	401	Family & Community: ECE	EDE	Education_Early Childhood	4	The role of the early childhood professional in collaborating with diverse families in the education and care of their children birth - age 8.	UG	LE	Lecture
Spring 2008	EDE419	419	Student Teaching: ECE	EDE	Education_Early Childhood	10	Students are assigned to a public or certified private facility under direct supervision of experienced teachers for a total of 10 weeks in K-3rd grades.	UG	IN	Internship
Spring 2008	EDE440	440	Exit Seminar: ECE	EDE	Education_Early Childhood	2	A culminating seminar for the Early Childhood Licensure Program. The focus is on teacher candidates' reflections of their student teaching experience, final ECE program portfolio evaluaton, and preparation for the ECE profession.	UG	SE	Seminar

Spring 2008	EDE440W	440W	Writing in EDE 440	EDE	Education_Early Childhood	0	Required writing component for EDE 440.	UG	LB	Lab
Spring 2008	EDE464	464	Assessment in ECE	EDE	Education_Early Childhood	4	Formal and informal techniques used for pre, formative, and summative assessments of young student's learning in order to plan and implement effective lessons and activities. Includes observations, naturalistic, authentic, portfolio, and standardized techniques.	UG	LE	Lecture
Spring 2008	EDE470	470	Workshop Early Ed	EDE	Education_Early Childhood	1	Intensive practical study in a selected area of early education.	UG	LE	Lecture
Spring 2008	EDE670	670	Workshop Early Ed	EDE	Education_Early Childhood	1	(Also listed as EDT 670.) Intensive practical study in a selected area of early education.	GR	LL	Lecture/Lab Combination
Spring 2008	EDE702	702	Manage Yng Chld Bahavior	EDE	Education_Early Childhood	3	The study of classroom behavior management within the framework of child development, developmentally appropriate practices, and constructivist education including pro-active planning and organization and appropriate expectations for young children.	GR	LE	Lecture

Spring 2008	EDE703	703	Soc Dev & Play in ECE	EDE	Education_Early Childhood	3	Social and emotional development and play as a purposeful behavior in young children; Curriculum, materials and assistive technology to facilitate communication and social interaction in early childhood settings.	GR	LE	Lecture
Spring 2008	EDE707	707	Lang Dev & Com Disord:ECE	EDE	Education_Early Childhood	3	Speech and language development, causes and effects of communication disorder, formal/informal evaluation, intervention strategies for the classroom teacher. Assistive technologies for children with speech and language disabilities.	GR	LE	Lecture
Spring 2008	EDE712	712	Adv St of Ch Dev:Typ&Atyp	EDE	Education_Early Childhood	3	Focuses on the development of the child birth to age 8, with emphasis on the genetic and environmental factors which underlie physical, cognitive, linguistic and social/emotional development.	GR	LE	Lecture
Spring 2008	EDE715	715	Yng Chld with Spec Needs	EDE	Education_Early Childhood	3	Study of the causes and effects of various developmental disabilities, theories, and legalities of early intervention services 0-8, service delivery models, family, and agency involvement.	GR	LE	Lecture

Spring 2008	EDE717	717	Mtg Ind Need of Yng Child	EDE	Education_Early Childhood	3	Covers the practices and procedures in developing activities for young children with developmental disabilities. Included will be modification and adaptations, as applied to development and implementation of the IFSP and IEP.	GR	LE	Lecture
Spring 2008	EDE720	720	Adv Cur Pln I:Int Lit&Art	EDE	Education_Early Childhood	3	Detailed definition of the concept of developmentally appropriate practice applied to educational settings for children ages three through eight. Focuses on applying the concept of planning for literacy using an integrated curriculum with expressive arts visual art, poetry, music, and creative movement. Field experience required.	GR	LE	Lecture
Spring 2008	EDE721	721	Ad Pro Pln II: Int Mth&Sci	EDE	Education_Early Childhood	3	Continued examination of developmentally appropriate practices for young children. Integrated planning for cognitive concepts including number, representation, visual/spatial skills, classification, logical thinking, and problem solving. Field experience required.	GR	LE	Lecture

Spring 2008	EDE730	730	Dev App Assessment in ECE	EDE	Education_Early Childhood	3	The various uses of appropriate assessment and evaluation in infancy through early childhood, including formal and informal, formative and summative, play-based, observation authentic and portfolio.	GR	LE	Lecture
Spring 2008	EDE731	731	Prog Erly Ch:Infant/Todl	EDE	Education_Early Childhood	3	A further investigation of the appropriate environment, enrichment activities, scheduling, evaluation, and interactional strategies in the Early Childhood setting with infants and toddlers (0-5 yrs).	GR	LE	Lecture
Spring 2008	EDE735	735	Anti-Bias Curricul in ECE	EDE	Education_Early Childhood	3	Examination of the sources of individual differences within the early childhood classroom including culture/ethnicity, race, language, learning style, and brain dominance. Field experience required.	GR	LE	Lecture
Spring 2008	EDE744	744	Conducting Research/ECE	EDE	Education_Early Childhood	3	Examination of current issues and trends in Early Childhood Education using traditional and contemporary electronic research technology. Develops proficiency needed to support students advocacy for programs that positively affect children.	GR	LE	Lecture

Spring 2008	EDE745	745	Comparative Theories/ECE	EDE	Education_Early Childhood	3	Study of the history, theory, goals, programs, approaches and related research underlying early childhood education, including early intervention, and early childhood special education as well as other program models and philosophies such as Reggio Emillia, High Scope, Montessori, etc.	GR	LE	Lecture
Spring 2008	EDE750	750	Design/Adm Family EC Prog	EDE	Education_Early Childhood	3	Examines roles of the administrator, including hiring, training, evaluation, accreditation regulation, program planning, marketing, and budgeting. Emphasizes sensitivity to the needs of families and communities.	GR	LE	Lecture
Spring 2008	EDE760	760	Practicum ECE/ECE Spec Ed	EDE	Education_Early Childhood	2	Supervised teaching experience for students who have completed student teaching or its equivalent and are seeking certification in pre-kindergarten or kindergarten. Number of years experience with children ages 3-8 in educational settings determines credit hours required.	GR	PR	Practicum
Spring 2008	EDE770	770	Ind Read & Minor Problems	EDE	Education_Early Childhood	1	Planned reading and/or project under guidance of an EDE faculty member. Titles vary.	GR	IS	Independent Study

Spring 2008	EDE800	800	ECE: Masters Seminar	EDE	Education_Early Childhood	3	Individual projects in Early Childhood Education required for M.Ed. Planning, professor and peer review, research, completion and presentation of completed chosen research paper or action research project.	GR	SE	Seminar
Spring 2008	EDL410	410	Paraprof Staff Training	EDL	Educational Leadership	1	Provides an orientation to the university for new Residence Services paraprofessionals to prepare them to be effective in their roles. Participants are exposed to the various student services available on campus as well as aspects of student development, the mission of the university, Residence Services, and New Student Orientation.	UG	LE	Lecture
Spring 2008	EDL411	411	Stu Dev Campus Life	EDL	Educational Leadership	1	Provides overview of various student development concepts and functions within a campus setting. Topics may include: community development and leadership; multiculturalism; peer counseling; interpersonal communication,; conflit mediation and resolution; developmental programming and developmental discipline.	UG	LE	Lecture

Spring 2008	EDL660	660	Prog in Residential Life	EDL	Educational Leadership	1	Provides an orientation to the university for new residence services paraprofessionals to prepare them to be effective in their roles. Participants will be exposed to the various student services available on campus as well as aspects of student development, the mission of the university, residence services, and new student orientation.	GR	LE	Lecture
Spring 2008	EDL661	661	Stu Dev Campus Life	EDL	Educational Leadership	1	Provides overview of various student development concepts and functions within a campus setting. Topics may include: community development and leadership; multiculturalism; peer counseling; interpersonal communication; conflict mediation and resolution; developmental programming and developmental discipline.	GR	LE	Lecture
Spring 2008	EDL662	662	Spec Topics Stu Affairs	EDL	Educational Leadership	1	Special topics in selected areas in Student Affairs in Higher Education designed to focus on management trends, theoretical frameworks, critical issues, specific professional areas within Student Affairs. Past topics have included Student Housing/Residential life and Management Issues in Student Affairs.	GR	LE	Lecture

Spring 2008	EDL670	670	Ed Leadership Wkshp	EDL	Educational Leadership	1	Intensive study of a selected area of the school curriculum and educational administration to meet the needs of inservice teachers, administrators, and curriculum supervisors.	GR	LE	Lecture
Spring 2008	EDL710	710	Profess Growth & Devel	EDL	Educational Leadership	1	Provides students with a foundation for professional development. Emphasis on examination of belief systems, teaching styles, and teachers as-learners; intra- and interpersonal communication skills needed in leadership roles; and functioning in a multicultural/pluralistic society.	GR	LE	Lecture
Spring 2008	EDL711	711	Schl Leadership Seminar	EDL	Educational Leadership	1	The development of leadership skills and abilities and the dynamics of team functioning, including decision-making models and processes, problem-solving techniques, communication skills, conflict management, and self-improvement.	GR	SE	Seminar
Spring 2008	EDL712	712	Philos & Curr Foundatns	EDL	Educational Leadership	4	Overview of past, present, and emerging curriculum trends. Examination of educational and curricular philosophy and how philosophy impacts school programs.	GR	LE	Lecture

Spring 2008	EDL713	713	App Psych Learning Thery	EDL	Educational Leadership	4	Selected theories of learning and their value to instructional practices. Emphasis on the relationships among learning theories, learner characteristics, motivational theories, and instructional practices.	GR	LE	Lecture
Spring 2008	EDL714	714	Context of Education	EDL	Educational Leadership	1	Emphasizes the evolution of theories and the laws that underlie the free compulsory educational system as well as the organization, control, and support by the public of the educational system.	GR	LE	Lecture
Spring 2008	EDL720	720	Analysis of Teaching	EDL	Educational Leadership	4	Focuses on teaching methods and skills, and on classroom climate, including microteaching, interaction analysis, and collection of feedback from students.	GR	LE	Lecture
Spring 2008	EDL721	721	Curr Design for Tchr	EDL	Educational Leadership	1	Management and leadership skills as related to the development and organization of curriculum and materials; implementation of the learning program with students.	GR	LE	Lecture
Spring 2008	EDL722	722	Instruct Manage & Eval	EDL	Educational Leadership	4	Study of the management and evaluation of instruction. Emphasizes uses of systematic management and evaluation models by classroom teachers, and the impact of nonclassroom components of school/society on the teacher s management and evaluation of instruction.	GR	LE	Lecture

Spring 2008	EDL730	730	Research on Teaching	EDL	Educational Leadership	4	Research on teaching effectiveness; culminates in the writing of a research proposal to be completed during the second year of the Teacher Leader Program.	GR	LE	Lecture
Spring 2008	EDL731	731	Stat & Appraisal in Ed	EDL	Educational Leadership	4	Introduction to educational statistics and appraisal techniques. Emphasis on how to understand and use research data. Methods for appraising student development and progress. Enrollment limited to participants in the Teacher Leader Program.	GR	LE	Lecture
Spring 2008	EDL732	732	Directed Inquiry: Tching	EDL	Educational Leadership	1	Individual research to satisfy requirements of a research project for Teacher Leader majors. Group and/or individual conferences with the research advisor.	GR	IS	Independent Study
Spring 2008	EDL733	733	Seminar: Prof Dev Tchr	EDL	Educational Leadership	1	Issues in research related to classroom teachers. Critical and current issues relevant to the development of classroom teachers as leaders within the context of their roles.	GR	SE	Seminar
Spring 2008	EDL740	740	Legal & Prof Issues	EDL	Educational Leadership	1	The legal framework of compulsion in education, the civil liberties of teachers, curriculum content, and academic freedom. Teachers rights, duties, and responsibilities to the education profession.	GR	LE	Lecture

Spring 2008	EDL741	741	Instructional Design	EDL	Educational Leadership	1	Management and leadership skills as related to organizational patterns, staffing, utilization of space, time, and facilities at the building level.	GR	LE	Lecture
Spring 2008	EDL751	751	Statistics and Research	EDL	Educational Leadership	4	Introduction to descriptive and inferential statistics and their application to assessment procedures.	GR	LE	Lecture
Spring 2008	EDL755	755	Research Projects	EDL	Educational Leadership	1	Conference course; individual research to satisfy requirements of research study for the Master of Education degree.	GR	IS	Independent Study
Spring 2008	EDL757	757	Student Assessment	EDL	Educational Leadership	1	Intensive study of formative and summative methods used by teachers to assess student performance and modify or differentiate instruction to meet student needs.	GR	LE	Lecture
Spring 2008	EDL759	759	Qualitative Research EDU	EDL	Educational Leadership	4	This course emphasizes the theoretical bases for qualitative research and includes training in qualitative methods, specifically, observation, interviewing, collecting written documents, grounded surveys, analysis and interpretation, and the presentation of the research.	GR	SE	Seminar

Spring 2008	EDL760	760	Stu Aff Higher Ed	EDL	Educational Leadership	4	An overview of the history, philosophy, organization, and structure of student personnel services. Various student affairs functions and professional competencies are presented. Current and future trends and issues in student affairs are considered.	GR	LE	Lecture
Spring 2008	EDL761	761	Theories of Student Dev	EDL	Educational Leadership	4	Studies theories of student development and their use in research and practice in student affairs, focusing specifically on college students.	GR	LE	Lecture
Spring 2008	EDL762	762	Stu Aff Admin Higher Ed	EDL	Educational Leadership	4	Surveys student personnel services in colleges and universities. Consideration is given to the organization, administration, and rationale of these services.	GR	LE	Lecture
Spring 2008	EDL763	763	Campus Ecology	EDL	Educational Leadership	4	Studies of campus ecology and the changing demographic and developmental issues facing college students. Studies the impact of the college environment on student development and the interaction between students and the environment. A combination of theory and research regarding college students and the environment are studied and applied.	GR	LE	Lecture

Spring 2008	EDL764	764	Prog Eval/Assmnt High Edu	EDL	Educational Leadership	4	Studies theories, models, and techniques for evaluation of SAHE programs, and student organizations. Focus on a systematic approach to designing, integrating and appraising the success of SAHE programs.	GR	LE	Lecture
Spring 2008	EDL765	765	Prac Stu Af Higher Ed	EDL	Educational Leadership	4	Provides an opportunity to work under supervision in an area of student affairs. This field work experience is accompanied by weekly on-campus seminars.	GR	IN	Internship
Spring 2008	EDL766	766	Adv Sem in Stu Affairs	EDL	Educational Leadership	4	Provides an opportunity for advanced students to explore current issues and future trends in higher education with focus on the influence on student affairs practice.	GR	SE	Seminar
Spring 2008	EDL767	767	Intern Stu Af Higher Ed	EDL	Educational Leadership	1	This field-based experience provides students with advanced practice and supervision in their major specialty area.	GR	IN	Internship
Spring 2008	EDL768	768	Finance & Budget in SAHE	EDL	Educational Leadership	4	Current and emerging trends for funding higher education and budget models utilized provide the focus of this course. University budget and financial statements will be analyzed, budget proposals developed, and budget reduction techniques explained.	GR	LE	Lecture

Spring 2008	EDL771	771	Ed Leadership Behavior	EDL	Educational Leadership	3	Focuses on the development of a strong base of understanding in organizational structure for skill building in leadership, communication, decision-making, and problem-solving. Educational renewal, political considerations, ethical behavior, professional development, and change processes are also included.	GR	LE	Lecture
Spring 2008	EDL772	772	Ed Administrative Behav	EDL	Educational Leadership	4	Develops an understanding of the principles of educational administrative processes, formal school structures and organization, and an introduction to school administrative task areas. School culture, principles of democratic school administration, ethical behavior, and other educational renewal oriented processes are also studied. The inclusion of a field experience emphasizes the course focus of actively blending theory and practice.	GR	LL	Lecture/Lab Combination

Spring 2008	EDL773	773	Curr Develop Sch Ldrs	EDL	Educational Leadership	3	Designed to improve the school leader/administrator s ability to manage and lead the development and organization of curriculum and materials. This course presents the concepts and skills of curriculum development and shows how to apply these to actual course planning.	GR	LE	Lecture
Spring 2008	EDL774	774	Analysis of Teaching	EDL	Educational Leadership	1	Provides school leaders the opportunity for analysis of teaching through the exploration of instructional methodologies, critical theory related to teaching, and strategies for continual improvement.	GR	LE	Lecture
Spring 2008	EDL775	775	Instructional Mgt & Eval	EDL	Educational Leadership	1	Provides school leaders strategies for developing, maintaining continual improvement processes using systems planning, instructional data, evaluation of improvement plans and communication of planning and improvement with all stakeholders.	GR	LE	Lecture
Spring 2008	EDL776	776	Supv of Instr & Personnel	EDL	Educational Leadership	1	Focus is on the supervision of curriculum and instruction. A systems approach to formative and summative assessment of instruction. The evaluation of curriculum and program effectiveness will be emphasized.	GR	LE	Lecture

Spring 2008	EDL777	777	Prepac: Role & Function	EDL	Educational Leadership	1	Focus will be on the roles performed by practicing educational leaders. Students will observe, interact and draw conclusions from field experience. Class sessions will integrate the field experience with knowledges and skills studied in prerequisite courses.	GR	IN	Internship
Spring 2008	EDL780	780	Ethics & Politic in Edu	EDL	Educational Leadership	4	Developing an understanding of potential structures and effective principles of school/community relations. Concepts of power, pressure groups, lobbying, potential networks, and public ethics are examined. Characteristics of effective communication, advisory bodies, and public relations programs are covered.	GR	LE	Lecture
Spring 2008	EDL781	781	Schl Finance & Econ	EDL	Educational Leadership	1	The financing of public education and the economics of education. Guiding principles for developing financial programs and management procedures are covered.	GR	LE	Lecture
Spring 2008	EDL782	782	School Law	EDL	Educational Leadership	3	Provides an examination of the legal framework that all school personnel must function in. Emphasis on both legal precedents and statutory provisions.	GR	LE	Lecture

Spring 2008	EDL790	790	Practicum in Inst Ldshp	EDL	Educational Leadership	4	Provides educational leadership degree candidates an opportunity to apply concepts and skills to educational practice and to evaluate their own leadership effectiveness.	GR	PR	Practicum
Spring 2008	EDL791	791	Curr Design & Evaluation	EDL	Educational Leadership	1	Provides curriculum and supervision students with knowledge and skills necessary to perform curriculum and instruction design and evaluation functions.	GR	LE	Lecture
Spring 2008	EDL792	792	Profess Develop & Change	EDL	Educational Leadership	1	Focuses on understanding needs and the motivation to change in self and others within the context of the school organization. Contemporary models of professional development and change theory are emphasized.	GR	LE	Lecture
Spring 2008	EDL793	793	Computer Apl for Ed Ldrs	EDL	Educational Leadership	1	Introduction to computers and their applications for educational leaders. Investigation of potential uses of the computer for student learning and school management and administration. Review and evaluation of specific hardware.	GR	LL	Lecture/Lab Combination

Spring 2008	EDL796	796	Organiz & Adm Pub Sch	EDL	Educational Leadership	1	Principles of democratic school administration; management of teaching and nonteaching personnel; role of administration in facilitating teaching and learning; and school/community relations.	GR	LE	Lecture
Spring 2008	EDL851	851	Adv Rch Design Anly	EDL	Educational Leadership	3	Individual and group study of ongoing applied educational research.	GR	SE	Seminar
Spring 2008	EDL852	852	Stat Analysis & Res Desig	EDL	Educational Leadership	4	Study of computation and interpretation of inferential statistics as they relate to the design of educational research. Critical study of research techniques and reporting methods. Computer applications will be stressed.	GR	LE	Lecture
Spring 2008	EDL853	853	Advanced Ed Statistics	EDL	Educational Leadership	4	Multivariate analysis including analysis of variance-factorial designs, repeated measures, analysis of covariance, multiple analysis of variance, multiple regression, and nonparametric techniques for 1 to k samples. Computer applications will be stressed.	GR	LE	Lecture
Spring 2008	EDL858	858	Advanced Ed Measurement	EDL	Educational Leadership	4	Test construction, evaluation, standardization, validation, reliability, item analysis, norm setting, criterion referencing, selection, and interpretation of standardized tests.	GR	LE	Lecture

Spring 2008	EDL870	870	Internship I: Principal	EDL	Educational Leadership	4	Provides experience in school administration. Students perform administrative tasks under supervision of a licensed school administrator.	GR	PR	Practicum
Spring 2008	EDL871	871	Management of the School	EDL	Educational Leadership	4	Focuses on the day-to-day operation of a school building and a school system. State requirements are emphasized in relation to operational procedures in all aspects of managing a school and a school system.	GR	LE	Lecture
Spring 2008	EDL872	872	Staff Personnel Admin	EDL	Educational Leadership	4	The development of understanding and procedures of administering staff personnel aspects of school operation. Areas of recruitment, selection, induction, appraisal, development, compensation, and motivation are covered. Emphasis is on the entry year performance based assessment and subsequent licensure renewal.	GR	LE	Lecture

Spring 2008	EDL873	873	Pupil Pers Services Admin	EDL	Educational Leadership	4	The development of understanding and the procedures of administering the pupil personnel service aspects of school operation. Ethical considerations and special education requirements are included in addressing student attendance and accounting, guidance and counseling functions, disciplinary issues, and extracurricular/co-curricular activities.	GR	LE	Lecture
Spring 2008	EDL874	874	Sch Bus Mgt & Facil	EDL	Educational Leadership	4	Guiding principles for developing adequate financial programs; detailed studies of sources of local, state, and federal revenue; and procedures for management of school funds with reference to budgeting, accounting, and auditing.	GR	LE	Lecture
Spring 2008	EDL890	890	Internship II: Principal	EDL	Educational Leadership	1	Provides experience in school administration. Students perform administrative tasks under supervision of a licensed school administrator.	GR	IN	Internship
Spring 2008	EDL920	920	Hst & Phil High Ed U.S.	EDL	Educational Leadership	4	Reviews history and development of higher and continuing education in the United States with special attention to forces that have shaped its development. Examines history of critical philosophical debates, and issues about the nature and role of higher education.	GR	LE	Lecture

Spring 2008	EDL921	921	Curriculum in Higher Ed	EDL	Educational Leadership	4	Introduction to patterns of curricular organization in the four-year college and university with attention to historical development and current models. Study of the issues governing curriculum planning, including the social, economic, political, historical, and philosophical contexts of which curriculum is formed and developed.	GR	LE	Lecture
Spring 2008	EDL922	922	Law of Higher Education	EDL	Educational Leadership	4	Examination of statute and case law that governs the operation of institutions of higher education. Issues of employment, evaluation, contracts, copyright, and student and faculty rights will form the basis of the course.	GR	LE	Lecture
Spring 2008	EDL923	923	Instruction in Higher Ed	EDL	Educational Leadership	4	Designed to facilitate the application of theory to practice in teaching in colleges and universities. Students will explore diverse pedagogical approaches and develop an understanding of the professional role of the faculty member.	GR	LE	Lecture
Spring 2008	EDL924	924	Admin in Higher Ed	EDL	Educational Leadership	4	Introduction to administrative, organizational, and leadership theory and practice in the two-year and four-year college and university. Participants explore historical, current, and future plans for administration in higher education.	GR	LE	Lecture

Spring 2008	EDL926	926	The Community College	EDL	Educational Leadership	4	Explores the historical roots of the most exciting, important innovation in American higher education since the Second World War, the community college. How and why did they come into being, how do they really work, and how can we make them more effective?	GR	LE	Lecture
Spring 2008	EDL928	928	Internship in Higher Ed	EDL	Educational Leadership	4	Provides opportunity for an in-depth field experience in higher education with administrative professionals. Designed to provide breadth to the students' prior experiences and be consistent with individual career goals.	GR	IN	Internship
Spring 2008	EDL929	929	Intercolleg Athl High Ed	EDL	Educational Leadership	4	Explores the role and impact of athletic programs at the intercollegiate level. Students study administrative and organizational structure, specialized functions, and professional career opportunities within the field of intercollegiate athletics. Planning, financing, programming, and management are studied, as well as the role of athletics within the educational experience.	GR	LE	Lecture

Spring 2008	EDL930	930	Internship I: CIPD	EDL	Educational Leadership	4	The internship provides significant opportunities for candidates to synthesize and apply the knowledge and skills identified in the district-level standards through substantial, sustained, standards-based work in real settings.	GR	IN	Internship
Spring 2008	EDL933	933	Instructional Leadership	EDL	Educational Leadership	3	Provides the specialist an opportunity to explore the topic of instruction in depth and to apply knowledge and strategies to the process of instructional improvement.	GR	LE	Lecture
Spring 2008	EDL941	941	Planning Ed Futures	EDL	Educational Leadership	4	Focuses on adaptation to social, political, and educational change in the future of education. Analysis and planning procedures address the probable social, political, economic, ethical, and intellectual factors that may appear on the horizon. Strategic planning, systems theory, change theory and processes are explored in connection to forecasting potential economic, enrollment, and demographic futures.	GR	LE	Lecture

Spring 2008	EDL945	945	Adv Curriculum Theory	EDL	Educational Leadership	3	This course is designed to provide advanced degree students an opportunity to study curriculum theories from original sources and to relate those theories to philosophical presuppositions and social-cultural foundations. The course will also focus on the critical evaluation of curriculum theories and models.	GR	LE	Lecture
Spring 2008	EDL950	950	InternshipII: CIPD	EDL	Educational Leadership	4	The internship provides significant opportunities for candidates to synthesize and apply the knowledge and skills identified in the district-level standards through substantial, sustained, standards-based work in real settings.	GR	IN	Internship
Spring 2008	EDL960	960	Pol and Soc Contexts	EDL	Educational Leadership	4	The course is designed for current and aspiring district-level administrators exploring the political and social forces shaping educational policy, instructional leadership, and classroom practice.	GR	SE	Seminar
Spring 2008	EDL961	961	Instructional Leadership	EDL	Educational Leadership	4	Emphasizes the roles of the curriculum, instructional, and staff development specialist. Focuses on devloping a strong base of understanding organizational structure and skill building in leadership, communication, decision-making, and problem solving.	GR	SE	Seminar

Spring 2008	EDL962	962	Ldrshp Indiv Coll Change	EDL	Educational Leadership	4	The course explores theory, research, and practive related to leading and managing organizational environments requiring creating and sustaining personal, professional, and organizational change and adaptations.	GR	SE	Seminar
Spring 2008	EDL963	963	Adv Curriculum Devep	EDL	Educational Leadership	4	The advanced standards-based course explores the development of curriculum from a district-level perspective.	GR	SE	Seminar
Spring 2008	EDL970	970	Internship 1: Supt	EDL	Educational Leadership	4	The internship provides significant opportunities for candidates to synthesize and apply the knowledge and skills identified in the district-level ELCC standards 1-3 through substantial, sustained, standards-based work in real settings.	GR	IN	Internship
Spring 2008	EDL971	971	Supt/Staff/Bd Relatshps	EDL	Educational Leadership	4	Emphasizes the strategic roles of the superintendent, staff, school board, unions, and community in light of local, state, and federal regulations and political pressure. Reviews the limits and role responsibilities of school district personnel and constituents from organizational and cultural perspectives.	GR	LE	Lecture

Spring 2008	EDL972	972	Ideas in Education	EDL	Educational Leadership	3	Draws on original sources and examines the impact of both professional and non-professional educational thinkers on American education. The impact of social trends on education will also be examined.	GR	LE	Lecture
Spring 2008	EDL973	973	Adv Curriculum Analysis	EDL	Educational Leadership	4	Focus will be research on schools as organizations, research on educational leadership and research relate to educational content and practice.	GR	IS	Independent Study
Spring 2008	EDL974	974	Seminar in Ed Leadership	EDL	Educational Leadership	3	Emphasis will be on issues in educational leadership and curriculum leadership. Program development and administrative practice will serve as a basis for emerging study issues.	GR	SE	Seminar
Spring 2008	EDL975	975	Directed Study	EDL	Educational Leadership	1	Designed for students enrolled in the Educational Specialist degree program and/or those students admitted to a cooperative doctoral program. Course requirements are determined by students and their assigned program advisors. Minimum requirements involve an individualized set of objectives, learning strategies, and evaluation design.	GR	IS	Independent Study

Spring 2008	EDL980	980	Community Relations	EDL	Educational Leadership	4	The course examines relationships between schools and communities from demographic, political, and marketing perspectives. The course focuses on school and community roles in delivering educational programs and services responsive to local needs.	GR	SE	Seminar
Spring 2008	EDL985	985	Organiz Dyn:Indiv/Organiz	EDL	Educational Leadership	4	Focuses on the individual and the organization. The respective needs and expectations of each are investigated as they apply to educational institutions. Emphasis is on interpersonal and organizational communication, group processes, conflict resolution, and collaboration for school improvement. These concepts are explored to help participants conceptualize the interpersonal nature of organizations.	GR	LE	Lecture

Spring 2008	EDL986	986	Org Behav in Ed& Hum Serv	EDL	Educational Leadership	4	Emphasizes the analysis of organizations and educational institutions in particular through a social systems orientation. Historical, current, and possible future organizational structures and processes are analyzed. Role theory, leadership theory, and styles, ethical behavior, and decision-making theory and practice are addressed from an organizational persepctive.	GR	LE	Lecture
Spring 2008	EDL987	987	Admin Leadership in Comm	EDL	Educational Leadership	4	Focuses on the development of leadership skills in relationship to individual and organizational communicationsto internal and external audiences. Varied communication venues and simulations are employed in ethical administrator skill development. Additionally, the course addresses the leader's role as facilitator in group processes, conflict management, interpersonal and contract negotiations, multicultural mediation methodology, decision-making, and problem-solving.	GR	LE	Lecture

Spring 2008	EDL988	988	Research & Educ Leader	EDL	Educational Leadership	4	Focuses on the practical applications and issues in research as it relates to educational leadership. Participants focus on research design and methodology, sampling techniques, instrument development, proposal writing, and the application of these skills through a research project to be implemented within a public school setting.	GR	LE	Lecture
Spring 2008	EDL990	990	Internship II: Supt	EDL	Educational Leadership	4	The internship provides significant opportunities for candidates to synthesize and apply the knowledge and skills identified in the district-level ELCC standards 4-6 through substantial, sustained, standards-based work in real settings.	GR	IN	Internship
Spring 2008	EDL991	991	Adv Sem Ed Leadership	EDL	Educational Leadership	1	Three basic topics are addressed: (1) Teacher Evaluation and Staff Development, (2) Issues in Leadership and Management, and (3) Innovations in Education.	GR	SE	Seminar

Spring 2008	EDL992	992	Schl Culture Prof Growth	EDL	Educational Leadership	4	The course explores the relationships between organizational change, professional growth, and leadership. Students engage in theoretical and research-based readings, discussions and activities regarding change, innovation, leadership, organizational culture, and professional development.	GR	SE	Seminar
Spring 2008	EDL993	993	Sch Dist Business Mgt	EDL	Educational Leadership	4	Guiding principles for developing adequate district fiscal programs; study of sources of revenue - local, state, and federal; procedures in management of district funds with reference to budgeting, accounting, auditing, public and governmental reporting; district cost-benefit analysis; district financial needs forecasting; and levy/income tax campaigns.	GR	LE	Lecture
Spring 2008	EDL994	994	Adv Sem for Ed Leaders	EDL	Educational Leadership	3	A synthesizing course which reviews the concepts, skills, and information of the total Educational Specialist's Program. Reporting of each candidate's research project will be a part of this course. An integration of the basic purposes of the program with the concentration, cognate, and common curriculum.	GR	LE	Lecture

Spring 2008	EDL995	995	Adv Inst Ed Leaders	EDL	Educational Leadership	1	Individual and group study of current problems and new skill development for educational leaders. Topics require multifaceted approaches and investigations. Topics might include personnel management related to negotiations, human rights, or decision making.	GR	LE	Lecture
Spring 2008	EDL999	999	Thesis	EDL	Educational Leadership	1	Research for thesis in Educational Specialist Program.	GR	IS	Independent Study
Spring 2008	EDS333	333	Learning Differences: Intr	EDS	Education_Special Education	4	An introduction to the history, laws, terminology, and best practice for the education of students with mild to moderate, moderate to intensive, or gifted educational needs. Also covered are inclusive education practices.	UG	LE	Lecture
Spring 2008	EDS444	444	Inst Behav Man of Ex Ind	EDS	Education_Special Education	3	Prepares special educators to meet the instructional and behavioral management demands particular to working with exceptional individuals, including those with severe behavior difficulties.	UG	LE	Lecture
Spring 2008	EDS455	455	Nat Needs Mild Hand	EDS	Education_Special Education	2	Causes and effects of specific learning and language disabilities, severe behavior disorders, and mild developmental disabilities. Study of teaching strategies appropriate for these individuals.	UG	LE	Lecture

Spring 2008	EDS459	459	Educational Collaboration	EDS	Education_Special Education	3	Techniques of collaborative consultation needed to enhance communication with exceptional individuals, parents, and educational team members.	UG	LE	Lecture
Spring 2008	EDS470	470	Workshop in Special Ed	EDS	Education_Special Education	1	Intensive practical study in a selected area of special education.	UG	LL	Lecture/Lab Combination
Spring 2008	EDS624	624	Addressing Lrng Diff	EDS	Education_Special Education	4	An introduction to the history, laws, terminology, and best practice for the education of students with mild to moderate, moderate to intensive, or gifted educational needs. Also covered are inclusive education practices.	GR	LE	Lecture
Spring 2008	EDS626	626	Intro Adaptive Technolog	EDS	Education_Special Education	4	Course introduces characteristics, problems, and adaptive technology needs of persons with moderate to intense disabilties. Hands-on experience using a variety of adaptive technology devices is required. 6 hours of related field work are required.	GR	LL	Lecture/Lab Combination
Spring 2008	EDS632	632	EI & ECSE Principles & Pract	EDS	Education_Special Education	4	Overview of historical foundations, laws, theories, philosophies, and models for working with students birth through age 8 with mild/moderate/intensive disabilities. Course includes the roles and responsibilities of an early childhood intervention specialist.	GR	LE	Lecture

Spring 2008	EDS633	633	EI & ECSE Family Partnership	EDS	Education_Special Education	4	An examination of family theory, including multiple perspectives of the impact of disability on families, methods for collaborative assessment, planning, and intervention in the home, EI, and ESCE environments. Field experience required.	GR	LE	Lecture
Spring 2008	EDS634	634	Yng Children w/ Med Needs	EDS	Education_Special Education	4	Overview of medical needs of children, birth to 8, with disabilities from the perspective of an ECIS. The focus is on families, professionals, agencies, and organizations collaborating to meet those needs. Field experience required.	GR	LE	Lecture
Spring 2008	EDS635	635	EI & ECSE Curriculu & Method	EDS	Education_Special Education	4	Practices and procedures to develop/adapt curriculum for students birth through grade 3 with mild/moderate/intensive disabilities. Course includes information on implementing the IEP and IFSP. Field experience required.	GR	LE	Lecture
Spring 2008	EDS642	642	Curric Methods & Mat M/M	EDS	Education_Special Education	3	Practices and procedures used in developing elementary and secondary curricula for students with mild/moderate educational needs. Included will be academic adaptations and development and implementation of the (IEP). Field/clinical experiences required.	GR	LL	Lecture/Lab Combination

Spring 2008	EDS643	643	Intro Augmentative Comm	EDS	Education_Special Education	4	Course introduces etiology, problems, and needs of individuals who are nonspeaking. Hands-on experiences are required using augmentative aids and devices with individuals with multiple impairments.	GR	LL	Lecture/Lab Combination
Spring 2008	EDS644	644	Instr Behac Management	EDS	Education_Special Education	3	Prepares special educators, Intervention Specialists and other professionals to meet the instructional and behavioral management demands particular to working with exceptional individuals, including those with severe emotional disturbance.	GR	LE	Lecture
Spring 2008	EDS645	645	Transitions Stu w/Except	EDS	Education_Special Education	3	Examines role of intervention specialists in shaping transition experiences for students with special needs. Emphasis on school to adult, but transitions at early childhood, elementary and middle school, also addressed; direct work with clients required.	GR	LE	Lecture
Spring 2008	EDS652	652	Phys,Sensory, Motor Except	EDS	Education_Special Education	4	Overview of the etiology and educational implications of physical disabilities, sensory deficits, and communication disorders. Emphasis on psycho-educational and physical needs of children and youth, including adaptation of methods and materials. Direct work with clients required.	GR	LE	Lecture

Spring 2008	EDS653	653	Curriculum Meth/Mat MI	EDS	Education_Special Education	4	Review of organizations, methods and techniques for educating and training individuals with moderate to intense educational needs. Surveys opportunities available for recreation, leisure time, and work habitation. Participation with individuals with moderate to intense educational needs.	GR	LL	Lecture/Lab Combination
Spring 2008	EDS654	654	Assessment Skill IS Role	EDS	Education_Special Education	3	Students learn to administer and interpret formal and informal educational assessment instruments and to communicate assessment data to parents and colleagues. Course content also includes learning to write IFSPs and IEPs.	GR	LE	Lecture
Spring 2008	EDS655	655	Exceptional Learners	EDS	Education_Special Education	3	Introduces prospective intervention specialists to the causes and effects of mild to moderate learning disorders. Covers cultural, social, and emotional needs of students and teaching strategies.	GR	LE	Lecture
Spring 2008	EDS656	656	Clin Practicum Remediatio	EDS	Education_Special Education	2	Supervised clinical practice in the diagnostic teaching of basic academic and social skills, including learning and study strategies.	GR	PR	Practicum

Spring 2008	EDS659	659	Comm & Consul Skills Edu	EDS	Education_Special Education	3	Techniques of collaborative consultation needed to enhance communication with exceptional individuals, parents, and educational team members. Direct work in the field is required.	GR	LE	Lecture
Spring 2008	EDS661	661	Internship:Special Educ	EDS	Education_Special Education	10	Graduate student teaching assignment for students seeking licensure to teach mild/moderate or moderate/intensive educational needs or early childhood intervention specialists. Required for students without previous student teaching experience.	GR	IN	Internship
Spring 2008	EDS670	670	Workshop Special Ed	EDS	Education_Special Education	1	Intensive practical study in a selected area of special education.	GR	LL	Lecture/Lab Combination
Spring 2008	EDS700	700	Spec Ed Enter Seminar	EDS	Education_Special Education	1	Required of beginning master's degree and license students to become familiar with research tools, resources, and writing styles, to design a plan for organizing and maintaining scholarly activities required for completing the comprehension examination.	GR	SE	Seminar
Spring 2008	EDS720	720	Creative Problem Solving	EDS	Education_Special Education	4	Introduction to creative problem-solving models and approaches that can be used by classroom teachers to involve students in the solutions of problems.	GR	LE	Lecture

Spring 2008	EDS722	722	Edu Students with Gifts	EDS	Education_Special Education	4	Overview of the characteristics of gifted children and youth. The historical and current aspects of education of the gifted, and family problems and vocational concerns.	GR	LE	Lecture
Spring 2008	EDS723	723	Curricula for the Gifted	EDS	Education_Special Education	4	Study of curriculum, materials, and methods appropriate for teaching gifted individuals. Local program models are presented and observed in class.	GR	LE	Lecture
Spring 2008	EDS730	730	Adaptations for Disability	EDS	Education_Special Education	4	An exploration of how persons with physical, cognitive, and/or sensory disabilities can be accommodated to facilitate productive membership in inclusive school, work and community enviornments.	GR	LE	Lecture
Spring 2008	EDS745	745	Special Educaiton Mid-PT	EDS	Education_Special Education	1	Seminar for completing the mid-point check of candidate progress toward intervention specialist/special education licensure and/or master's degree.	GR	LE	Lecture
Spring 2008	EDS771	771	Field Experience	EDS	Education_Special Education	3	A supervised observation experience for students who are completing the pre-licensure sequence to teach students with mild/moderate, moderate/intensive, or gifted educational needs.	GR	IN	Internship
Spring 2008	EDS799	799	Spec Ed Exit Seminar	EDS	Education_Special Education	1	Seminar for completing the comprehensive examination for attaining a Master of Education in Special Education.	GR	SE	Seminar

Spring 2008	EDT110	110	The Electronic Library	EDT	Educational Technology	2	Prepares students to take advantage of the latest electronic information technology to efficiently find, evaluate, and use information resources available in electronic or traditional formats. Titles vary.	UG	LE	Lecture
Spring 2008	EDT211	211	Keyboarding	EDT	Educational Technology	3	Introduction to the keyboard and the development of keyboarding speed and accuracy. Basic document formatting with word processing software is practiced in the production of correspondence, reports, and tabulations.	UG	LE	Lecture
Spring 2008	EDT212	212	Adv Keyboarding/ Desktop Pub	EDT	Educational Technology	3	Acquired skills in keyboarding, word processing, and document formatting are reinforced in the production of documents with graphics and other advanced features. Skill building activities continue to build keyboarding speed and accuracy. Two lab hours per week required.	UG	LE	Lecture
Spring 2008	EDT220	220	Basic Word Processing	EDT	Educational Technology	3	Essential features of word processing software are introduced and practiced in the creating of a variety of documents for business and personal use.	UG	LE	Lecture

Spring 2008	EDT221	221	Intern Word Processing	EDT	Educational Technology	3	In-depth study and application of the advanced features of word processing software. Editing and composing activities emphasize critical thinking and communication skills. Two lab hours per week required.	UG	LE	Lecture
Spring 2008	EDT222	222	Advanced Word Processing	EDT	Educational Technology	3	Principles of typography and design supplement advanced work processing functions in desktop applications that include newsletters, flyers, brochures, manuals, presentation media, and Web publishing. Two lab hours per week required.	UG	LE	Lecture
Spring 2008	EDT280	280	App Computer Tech	EDT	Educational Technology	4	Instruction to the use of computer-based technology in K-12 instruction. Focus is on selecting courseware and integrating it into lessons.	UG	LL	Lecture/Lab Combination
Spring 2008	EDT370	370	Independent Study	EDT	Educational Technology	1	Student pursues an individualized course of study under the close supervision of a faculty member. It may include extensive readings, a research project, a paper, or a production.	UG	IS	Independent Study

Spring 2008	EDT433	433	Curriculum:Bus/Mkt Ed	EDT	Educational Technology	4	Instructional strategies in using technology as a tool in teaching and learning. Topics include the role of state and professional guidelines in curriculum development. Completion of two-thirds of major content field required. Two hour lab per week required.	UG	LL	Lecture/Lab Combination
Spring 2008	EDT434	434	Curriculum:Offic Pro/Tech	EDT	Educational Technology	4	Instructional strategies and trends in curriculum development as affected by current office technology, employer expectations, and state and professional guidelines. Field/clinical experiences required. Two hours lab per week required.	UG	LL	Lecture/Lab Combination
Spring 2008	EDT455	455	Television Production	EDT	Educational Technology	4	Survey of television production from a single camera, remote production perspective, including use of editing equipment.	UG	LL	Lecture/Lab Combination
Spring 2008	EDT470	470	Workshop Ed Tech	EDT	Educational Technology	1	Intensive, practical study in a selected area of educational or applied technology. Titles vary.	UG	LL	Lecture/Lab Combination
Spring 2008	EDT633	633	Business Education	EDT	Educational Technology	4	Business education philosophy, objectives, and curricula on the secondary level of instruction. Curriculum and materials in basic business subjects, bookkeeping, data processing, and sales communication.	GR	LL	Lecture/Lab Combination

Spring 2008	EDT634	634	Curriculum:Offic Pro/Tech	EDT	Educational Technology	4	Curriculum, methods, and materials in typewriting, keyboarding, word processing, and office procedures in the secondary school; current trends in teaching typewriting, keyboarding, word processing, and office procedures.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT670	670	Wksp Ed Tech	EDT	Educational Technology	1	Intensive, practical study in a selected area of educational or applied technology. Titles vary.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT680	680	App of Multimedia	EDT	Educational Technology	4	Application of multimedia resources in a wide variety of professional disciplines. Software applications include digital storytelling, web design, and electronic portfolio production.	GR	LE	Lecture
Spring 2008	EDT700	700	Entry Seminar Ed Tech	EDT	Educational Technology	2	Introductory seminar into educational technology programs. Students should take this class before or concurrently with their educational technology coursework.	GR	SE	Seminar
Spring 2008	EDT711	711	Sm Lib Media Collect Dev	EDT	Educational Technology	4	Focuses on the process for developing school library media center collections. Includes policy development, selection, acquisition, weeding, evaluation, development and use of collections, and copyright/intellectual freedom issues.	GR	LE	Lecture

Spring 2008	EDT715	715	Internet & DB Search	EDT	Educational Technology	2	Strategies are developed to efficiently locate information and ideas on the Internet as well as in fee-based information services.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT716	716	Bldg Online Applications	EDT	Educational Technology	4	Examination of online educational resources by teaching level, subject, and specialized areas. Consideration of issues of intellectual property rights, ethics, student safety, and professional responsibilities.	GR	LB	Lab
Spring 2008	EDT721	721	Catalog & Classification	EDT	Educational Technology	4	Focuses on the process of developing library media center retrieval systems for print/nonprint resources. Students learn to establish standard bibliographic description, access points, classification, subject description, and MARC format for automated systems.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT724	724	Foundations Bus Ed	EDT	Educational Technology	3	Philosophy and objectives of the business education and vocational business and office education curricula on the secondary and postsecondary levels of instruction. Guidance, selection, and placement of students and contemporary influences on business education and vocational business and office education are included.	GR	LE	Lecture

Spring 2008	EDT727	727	Curr Trends Non-Skill Bus	EDT	Educational Technology	3	Study of recent developments in the teaching of basic business subjects including vocational programs and the development of appropriate teaching strategies.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT729	729	Curr Trends Acctg & DP	EDT	Educational Technology	3	Analysis of the curriculum of business education and vocational business and office education in accounting and data processing, and the development of teaching strategies.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT731	731	SLM I	EDT	Educational Technology	5	Focuses on the organization and administration of school libraries including policies and procedures, facilities, budgeting, personnel, program evaluation, and marketing/advocacy. Includes field experience component.	GR	LE	Lecture
Spring 2008	EDT732	732	SLM II	EDT	Educational Technology	5	Focuses on the process for developing school library collections, physical and virtual. Includes policies, material selection, acquisitions, maintenance, and evaluation of collections; copyright and intellectual freedom issues. Includes field experience component.	GR	LE	Lecture
Spring 2008	EDT733	733	SLM III	EDT	Educational Technology	5	Teaching information literacy skills, collaborating with classroom teachers, standards alignment, and evidence-based practice. Includes field experience.	GR	LE	Lecture

Spring 2008	EDT734	734	SLM Internship	EDT	Educational Technology	1	Supervised field experience in a school library media center - one week on-site all day.	GR	IN	Internship
Spring 2008	EDT745	745	Bldg LS w/Storytelling	EDT	Educational Technology	4	Students will learn the literature and technique of storytelling. Develop lesson plans to support speaking, listening, reading and writing skills.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT746	746	Teach Info & Research Skl	EDT	Educational Technology	4	Major concepts covered include the application of a nonlinear information skills model across curricula: interdisciplinary and authentic curriculum design; and electronic information searching skills.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT749	749	Intro Instructional Media	EDT	Educational Technology	4	Survey course in instructional media including the interpretation of visuals (projected and nonprojected), film, instructional television, gaming, audio technology, multimedia systems, computers, operation of audiovisual equipment, and media facilities. Focuses on the appropriate use of media for specific instructional outcomes.	GR	LL	Lecture/Lab Combination

Spring 2008	EDT751	751	Media Literacy I	EDT	Educational Technology	4	Use of communication competencies and critical thinking skills, including the ability to access, interpret, evaluate, and communicate information delivered in formats that use images, voice and sound.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT756	756	Media Literacy II	EDT	Educational Technology	4	Production of media-based resources that include print and non-print materials that use image, text, language, sound and motion to convey informational communications and messages.	GR	LB	Lab
Spring 2008	EDT763	763	Young Adult Literature	EDT	Educational Technology	4	Students demonstrate applications of young adult literature for ages 12 21 using booktalks, response-centered approach techniques, literary projects, voices in young adult literature discussions, response journals, and media and young adult literature discussions.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT770	770	Independent Study	EDT	Educational Technology	1	Individualized course of study under the supervision of the faculty. May include, but not limited to, extensive readings, the performance of a research project, a paper, or a production.	GR	IS	Independent Study

Spring 2008	EDT780	780	ICT in Education	EDT	Educational Technology	4	Information and communication technology provides effective technology integration strategies to educators in the K-12 arena. Participants will be introduced to key technology skills and explore current and emerging practices in educational technologies.	GR	LE	Lecture
Spring 2008	EDT782	782	Devel Multimedia Prod	EDT	Educational Technology	4	Students use elements of instructional design and storyboarding techniques to translate instruction into various types of multimedia presentations.	GR	LB	Lab
Spring 2008	EDT786	786	Appl of Computers in Ed	EDT	Educational Technology	4	Types of educational software and applications, software evaluation, curriculum development, and lesson planning integrating computer courseware.	GR	LB	Lab
Spring 2008	EDT791	791	Org&Adm School Media Ctr	EDT	Educational Technology	4	Administrative practices and services that relate to the school library media center. Considers problems pertaining to standards, legislation, personnel, planning facilities, materials, instruction, and management procedures.	GR	LL	Lecture/Lab Combination

Spring 2008	EDT793	793	Ed Networking of Comp	EDT	Educational Technology	4	Basic and practical networking: preparing educators to communicate, problem-solve, use computer network hardware, LAN and WAN operating systems, and data communication basics including resource monitoring and sharing, electronic messaging, and security issues.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT799	799	Exit Seminar in Ed Tech	EDT	Educational Technology	2	Individual and group study of problems related to educational technology. Enrollment is limited to department majors. Should be taken near or at the completion of master degree program.	GR	SE	Seminar
Spring 2008	EDT817	817	Issues in Telecom in Ed	EDT	Educational Technology	4	Students will meet in seminar-fashion in traditional and virtual classrooms. Students will participate in an interactive online discussion group. Students will create and manage an online learning community.	GR	LB	Lab
Spring 2008	EDT839	839	Inst Design & Devlopment	EDT	Educational Technology	4	Advanced course in the development of a wide range of techniques and materials to improve instruction. Includes factors that facilitate learning, patterns for teaching and learning, the contributions of audiovisual material to improve learning, procedures for designing instruction, and the instructional design plan.	GR	LE	Lecture

Spring 2008	EDT890	890	Internship	EDT	Educational Technology	1	Students are assigned for a maximum of 100 hours to a library, learning center, computer facility, or video operation to gain practical experience under supervised conditions.	GR	IN	Internship
Spring 2008	EDT893	893	Grant Wrt Prog Eval EDT	EDT	Educational Technology	4	An in-depth study of educational technology concepts and procedures to expand and enhance educational technology in academic settings through the evaluation of current technology services, the planning, and preparation of technology grants.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT895	895	Adm & Superv of Ed Tech	EDT	Educational Technology	4	Covers leadership theory and networking; qualifications and duties of the director; planning and administering the program; preparing the budget; buying equipment and handling materials; in-service training and evaluation of the program.	GR	LL	Lecture/Lab Combination
Spring 2008	EDT899	899	Master's Thesis	EDT	Educational Technology	1	The project may be a thesis or creative production and is prepared under the guidance of the student's advisory committee.	GR	IS	Independent Study
Spring 2008	EDT975	975	Directed Study	EDT	Educational Technology	4	Focus on technology. Involves library research, analysis, evaluation, problem solving, and critical thinking.	GR	IS	Independent Study

Spring 2008	EE140	140	Prin of Elec Engineering	EE	Electrical Engineering	3	Provides a practical introduction to important applications, and hands-on experience with components and assembly of electrical systems. Laboratory experience is emphasized.	UG	LL	Lecture/Lab Combination
Spring 2008	EE250	250	Egr Prblm Slvng w MATLAB	EE	Electrical Engineering	2	Provides engineering students an extensive hands-on experience of MATLAB. Topics include relational and logic operations, array manipulation, low-level I/O, graphics, and symbolic manipulations.	UG	LE	Lecture
Spring 2008	EE260	260	Digital Circuits	EE	Electrical Engineering	4	(Also listed as CEG 260.) Topics include switching algebra and switching functions, logic design of combinational and sequential circuits using TTL, combinational logic design with MSI and LSI, busing, storage elements, and instrumentation. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	EE260L	260L	Digital Circuits Lab	EE	Electrical Engineering	0	Required laboratory for EE 260.	UG	LB	Lab
Spring 2008	EE301	301	Circuit Analysis I	EE	Electrical Engineering	4	Basic elements and laws, circuit analysis techniques and concepts, energy storage elements, first and second order circuits, sinusoidal steady state analysis.	UG	LE	Lecture

Spring 2008	EE302	302	Circuit Analysis I Lab	EE	Electrical Engineering	1	Computer-assisted analysis, RLC circuits, operational amplifiers and circuits, Thevenin and Norton equivalents, maximum power transfer, and AC networks.	UG	LB	Lab
Spring 2008	EE303	303	Circuit Analysis II	EE	Electrical Engineering	3	Circuit review, alternating current concepts, computer-aided circuit analysis, two-port networks, power.	UG	LE	Lecture
Spring 2008	EE304	304	Circuit Analysis II Lab	EE	Electrical Engineering	1	Application of AC concepts, computer-aided circuit analysis, two-port networks, and power theory.	UG	LB	Lab
Spring 2008	EE321	321	Linear Systems I	EE	Electrical Engineering	4	Considers systems in a broad context including linear, nonlinear; variant, invariant; and analog and discrete. Various approaches to system and signal modeling are also discussed with emphasis on the Fourier transform technique.	UG	LE	Lecture
Spring 2008	EE322	322	Linear Systems II	EE	Electrical Engineering	4	Discrete time signals and systems, the z-transform, input/output theory, discrete Fourier transform, IIR and FIR filter design, relationships, and sampling.	UG	LE	Lecture

Spring 2008	EE325	325	Numerical Methods for Egr	EE	Electrical Engineering	4	The course is a hands-on exposure to computational tools. The three contact hours of lecture define and simulate problems resulting from electrical and mechanical engineering disciplines. The one contact-hour lab consists of interactive MATLAB sessions with instructor supervision. Students will learn to analyze, solve, and interpret the results of engineering problems encountered in EE and ME senior-level courses. The primary goal of this course is to establish an understanding of the processes and limitations of machine computation, and to equip students with the competency to be productive problem solvers.	UG	LL	Lecture/Lab Combination
Spring 2008	EE326	326	Random Signals and Noise	EE	Electrical Engineering	4	Provides a practical introduction to the concepts of random events, characterization of stochastic signals, first and second order moment descriptions of random processes, and input/output descriptions of random signals and noise in linear systems.	UG	LE	Lecture

Spring 2008	EE331	331	Electronic Devices	EE	Electrical Engineering	3	Introduction to basic solid-state electronic devices. Fundamentals necessary for comprehension and further study of modern engineering electronics. Major topics include carrier flow in semi-conductors, p-n junction theory, semiconductor diodes, bipolar junction transistors, field effect transistors, biasing, and introduction to amplifiers.	UG	LE	Lecture
Spring 2008	EE332	332	Electronic Devices Lab	EE	Electrical Engineering	1	Applications of diodes and transistors in analog circuits, design of bias circuits.	UG	LB	Lab
Spring 2008	EE345	345	Electromagnetics	EE	Electrical Engineering	4	Electrostatics and magnetics; induced electro-motive force. Maxwell equations and their physical interpretation and application.	UG	LE	Lecture
Spring 2008	EE346	346	Tran Lines Waveguides Ant	EE	Electrical Engineering	4	Plane waves in free space and matter. Transmission line equations and application of Smith chart. Wave propagation in rectangular waveguides. Introduction to radiating systems, including dipole and loop antennas. Rudimentary design of typical systems containing transmission lines, waveguides, and antennas.	UG	LE	Lecture

Spring 2008	EE401	401	Elec Ckts & Devices	EE	Electrical Engineering	3	Application of modern electronics to instrumentation and data collection. Topics include semiconductor devices, small signal and power amplifiers, operational amplifiers, power supplies, digital fundamentals, and microprocessors. For nonmajors.	UG	LE	Lecture
Spring 2008	EE402	402	Elec Ckts & Devices Lab	EE	Electrical Engineering	2	Experiments in simple circuits, diode and transistor circuits, operational amplifiers, and simple microprocessors.	UG	LB	Lab
Spring 2008	EE410	410	Introduction to MEMS	EE	Electrical Engineering	4	This course covers the history, design, and fabrication of micro-electro-mechanical systems (MEMS), and the basic operating theory of selected MEMS transducers. Typical fabrication methods covered include surface micromachining, bulk micromachining, and micromolding.	UG	LE	Lecture
Spring 2008	EE412	412	Industrial Controls/Auto	EE	Electrical Engineering	4	For each student to gain a working knowledge of industrial controls and automation. Focus is on developing an understanding of wiring diagram creation, hardware selection, and programmable logic controller design and operation. Includes laboratory.	UG	LL	Lecture/Lab Combination

Spring 2008	EE413	413	Control Systems I	EE	Electrical Engineering	3	Introductory course providing students with a general control background. Major topics include block diagrams and signal-flow graphs, electromechanical modeling including state variable representation, time response, root locus, and introduction to design.	UG	LE	Lecture
Spring 2008	EE414	414	Control Systems I Lab	EE	Electrical Engineering	1	Application and testing of control systems theory with electromechanical systems.	UG	LB	Lab
Spring 2008	EE415	415	Control Systems II	EE	Electrical Engineering	3	Using Control Systems I background, this course concentrates on controller design, in both the time and frequency domains, using Nyquist, Bode, and root locus techniques.	UG	LE	Lecture
Spring 2008	EE416	416	Control Systems II Lab	EE	Electrical Engineering	1	Application and testing of control systems theory with electromechanical systems.	UG	LB	Lab
Spring 2008	EE417	417	Digital Control Systems	EE	Electrical Engineering	3	Samples spectra and aliasing, analysis and design of digital control systems using root locus and transform techniques; discrete equivalents of continuous controller, quantization effects, and introduction to programmable logic controllers.	UG	LE	Lecture

Spring 2008	EE419	419	Intro Fuzzy Logic Ctrl	EE	Electrical Engineering	4	(Also listed as CEG 419.) Foundations and philosophy of fuzzy logic and applications to control theory. Relationships between classical PID control and fuzzy rule-based control. Techniques for rule construction and adaptive fuzzy logic controllers. Case studies of fuzzy logic control applications. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	EE419L	419L	Intro Fuzzy Log Ctrl Lab	EE	Electrical Engineering	0	Required laboratory for EE 419.	UG	LB	Lab
Spring 2008	EE420	420	Digital Control Sys Lab	EE	Electrical Engineering	1	Sampling, temperature control, position control on a microprocessor-based system, PLC implementation, quantization, error computational delay, and frequency response.	UG	LB	Lab
Spring 2008	EE421	421	Digital Communication	EE	Electrical Engineering	4	Analysis of communication systems using the Fourier transform and the convolution integral. Discussion of Nyquist's ampling theorem and an introduction to binary pulse code modulation (PCM). Various analog (AM, SSB, WBFM) and digital (BPSK, AK, FSK) modulation techniques are also discussed and analyzed.	UG	LE	Lecture

Spring 2008	EE431	431	Electronic Circuits	EE	Electrical Engineering	3	Theory and application of basic engineering electronics developed for discrete and integrated circuits. Topics include bipolar and field effect transistor amplifier analysis and design, frequency response, and multi-stage and feedback amplifiers.	UG	LE	Lecture
Spring 2008	EE431W	431W	Writing in EE 431	EE	Electrical Engineering	0	Required writing component for EE 431.	UG	LB	Lab
Spring 2008	EE432	432	Electronic Circuits Lab	EE	Electrical Engineering	1	Design of single and multiple stage amplifier circuits, feedback amplifiers, circuits to meet frequency response specifications, and output stages.	UG	LB	Lab
Spring 2008	EE432W	432W	Writing in EE 432	EE	Electrical Engineering	0	Required writing component for EE 432.	UG	LB	Lab
Spring 2008	EE435	435	Analog & Digital Filters	EE	Electrical Engineering	4	Filter theory and approximation. Synthesis of active-RC and switched capacitor filters. Sensitivity analysis and design centering concepts.	UG	LE	Lecture

Spring 2008	EE436	436	Digital Signal Prcsng	EE	Electrical Engineering	4	Introduces the principles and applications of digital signal processing (DSP) from the design and implementation perspective. Topics include analog-to-digital/digital-to-analog converters and digital filters, Fourier analysis algorithms, and real-time applications, all implemented on a TMS320C30 floating point DSP chip.	UG	LE	Lecture
Spring 2008	EE436L	436L	Digital Signl Proc Lab	EE	Electrical Engineering	0	Required laboratory for EE 436.	UG	LB	Lab
Spring 2008	EE437	437	Modern Signal Processing	EE	Electrical Engineering	4	Introduction to advanced digital signal processing design concepts. Focus on time and frequency domain algorithms. Methods include multirate signal processing. Filter banks, time-frequency analysis, and wavelets. Examples taken from audio signal processing.	UG	LE	Lecture
Spring 2008	EE440	440	Intro Nanosci/Nanotech	EE	Electrical Engineering	4	Introduction to nanoscience and technology. Topics include introduction to quantum mechanics, fabrication, characterization, materials, electronic properties, optical properties, magnetic properties, devices, MEMS and NEMS.	UG	LE	Lecture

Spring 2008	EE440L	440L	Lab	EE	Electrical Engineering	0		UG	LB	Lab
Spring 2008	EE444	444	Linear Integer Circuits	EE	Electrical Engineering	4	Theory and applications of linear integrated circuits. Topics include ideal and real operational amplifiers, frequency response and compensation, active filters, comparators, and waveform generators. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	EE444L	444L	Linear Integ Circuits Lab	EE	Electrical Engineering	0	Required laboratory for EE 444.	UG	LB	Lab
Spring 2008	EE445	445	EM Compatability	EE	Electrical Engineering	4	Identification of possible sources of electromagnetic interference (EMI) in an electronic device or system. Fundamental EMC design principles concerning conducted and radiated emissions, reduction of susceptibility to EMI and EMI shielding.	UG	LE	Lecture
Spring 2008	EE446	446	Microwave Circuit Design	EE	Electrical Engineering	4	Review of Smith chart, introduction to microstrip lines, impedance matching, power gain equations, stability considerations, and design methods for amplifiers and oscillators. CAD is used.	UG	LE	Lecture

Spring 2008	EE447	447	Antenna Theory &Desgn	EE	Electrical Engineering	4	Linear dipole antennas, antenna arrays, thin-wire antennas, moment method analysis examples (vee dipole, folded dipole, etc.), and broadband and frequency-independent antennas. Computer-aided design and analysis of wire antennas, feed networks, and antenna arrays using antenna CAD software.	UG	LE	Lecture
Spring 2008	EE447L	447L	Antenna Thry &Desgn Lab	EE	Electrical Engineering	0	Required laboratory for EE 447.	UG	LB	Lab
Spring 2008	EE449	449	Pulse & Digital Circuits	EE	Electrical Engineering	4	Design, analysis, and application of pulse and switching circuits using both Field Effect Transistors (FETs) and Bipolar Junction Transistors (BJTs). Transistor level design of digital integrated circuits including NMOS, CMOS, TTL, and ECL logic families. Design of digital interface and buffer circuits. Transmission line effects in digital applications. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	EE449L	449L	Pulse & Digital Cir Lab	EE	Electrical Engineering	0	Required laboratory for EE 449.	UG	LB	Lab

Spring 2008	EE451	451	Digital Systems Design	EE	Electrical Engineering	4	(Also listed as CEG 360.) Topics include flip-flops, registers, counters, programmable logic devices, memory devices, register-level design, and microcomputer system organization. Students must show competency in the design of digital systems. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	EE451L	451L	Digital Sys Design Lab	EE	Electrical Engineering	0	Required laboratory for EE 451.	UG	LB	Lab
Spring 2008	EE454	454	VLSI Design	EE	Electrical Engineering	4	(Also listed as CEG 454.) Introduction to VLSI system design. Topics include CMOS devices and circuit design techniques, basic building blocks for CMOS design, fabrication processing and design rules, chip planning and layout, system timing and power dissipation, simulation for VLSI design, and signal processing with VLSI.	UG	LE	Lecture
Spring 2008	EE454L	454L	VLSI Design Lab	EE	Electrical Engineering	0	Required laboratory for EE 454.	UG	LB	Lab

Spring 2008	EE456	456	Intro to Robotics	EE	Electrical Engineering	4	(Also listed as CEG 456, ME 456.) An introduction to the mathematics, programming, and control of robots. Topics include coordinate systems and transformations, manipulator kinematics and inverse kinematics, trajectory planning, Jacobians, and control.	UG	LE	Lecture
Spring 2008	EE456L	456L	Intro to Robitics Lab	EE	Electrical Engineering	0	Required laboratory for EE 456.	UG	LB	Lab
Spring 2008	EE458	458	Ckt Dsgn w PLDs & FPGAs	EE	Electrical Engineering	4	(Also listed as CEG 458.) Design and application of digital integrated circuits using programmable logic devices (PLDs) and field programmable gate arrays (FPGAs). A commercial set of CAD tools (Mentor Graphics and Xilinx) will be used in the laboratory portion of the course.	UG	LE	Lecture
Spring 2008	EE458L	458L	Ckt Des/PLDs&FPGAs Lab	EE	Electrical Engineering	0	Required laboratory for EE 458.	UG	LB	Lab

Spring 2008	EE459	459	Circuit Desgn with VHDL	EE	Electrical Engineering	4	(Also listed as CEG 459.) Application of VHSIC hardware description language (VHDL) to the design, analysis, multi-level simulation and synthesis of digital integrated circuits. A commercial set of CAD tools (Mentor Graphics) will be used in the laboratory portion of the course.	UG	LE	Lecture
Spring 2008	EE459L	459L	Ckt Desgn with VHDL Lab	EE	Electrical Engineering	0	Required laboratory for EE 459.	UG	LB	Lab
Spring 2008	EE462	462	Ckt Dsgn e PLDs & FPGAs	EE	Electrical Engineering	4	(Also listed as CEG 458.) Design and application of digital integrated circuits using programmable logic devices (PLDs) and field programmable gate arrays (FPGAs). A commercial set of CAD tools (Mentor Graphics and Xilinx) will be used in the laboratory portion of the course.	UG	LE	Lecture
Spring 2008	EE462L	462L	Ckt Des PLDs & FPGAs Lab	EE	Electrical Engineering	0	Required laboratory for EE 462.	UG	LB	Lab
Spring 2008	EE470	470	Introduction to Sensors	EE	Electrical Engineering	4	The course offers and overview of basic sensor technology to provide the engineering student with practical working knowledge of sensors. Course will include basic operating principles, basic electronics and measurement principles.	UG	LE	Lecture

Spring 2008	EE470L	470L	Introduction to Sensors Lab	EE	Electrical Engineering	0		UG	LB	Lab
Spring 2008	EE473	473	Wireless Communication I	EE	Electrical Engineering	4	Concepts and techniques of probability theory are reviewed and extended to random process and information theory. Baseband digital PCM technique, selected digital RF modems, and introduction to communication networks are presented.	UG	LE	Lecture
Spring 2008	EE473L	473L	Communic Sys Desgn I Lab	EE	Electrical Engineering	0	Required laboratory for EE 473.	UG	LB	Lab
Spring 2008	EE474	474	Wireless COM Sys Lab	EE	Electrical Engineering	1	Hands on experience of wireless communication systems. Topics include: analog and digital modulation and demodulation (AM, FM, BPSK, QPSK, etc.), frequency-flat and frequency-selective fading, equalization, diversity, BER performance of digital wireless communication.	UG	LB	Lab
Spring 2008	EE475	475	Intro to Radar Systems	EE	Electrical Engineering	4	Study of the radar equation, antenna patterns, target cross sections and system losses, radar measurements, pulse Doppler and coherent techniques, detection probability and signal-to-noise ratio, side lobe clutter, synthetic arrays, and pulse compression techniques.	UG	LE	Lecture

Spring 2008	EE476	476	Wireless Communication II	EE	Electrical Engineering	4	This course introduces advanced wireless communication techniques. Topics include: spreading spectrum technology and CDMA, mutli-user detection and interference cancellation, multi-carrier transmission and ultra-wideband transmission technology, cognitive radio and dynamic spectrum access.	UG	LE	Lecture
Spring 2008	EE478	478	Coding Theory	EE	Electrical Engineering	3	(Also listed as MTH 456, CEG 478.) Examines the essentials of error-correcting codes and the study of methods for efficient and accurate transfer of information. Topics to be covered include basic concepts, perfect and related codes, cyclic codes, and BCH codes.	UG	LE	Lecture
Spring 2008	EE480	480	Selected Topics in EE	EE	Electrical Engineering	1	Prototype offering for a new course in electrical engineering. Topics and prerequisites vary.	UG	LE	Lecture
Spring 2008	EE481	481	EE Sr. Design Project I	EE	Electrical Engineering	3	A project-oriented design course integrating design methodology with the principles of major electrical engineering disciplines. Students from working groups, define design projects and select faculty advisors according to their interests, needs and knowledge bases.	UG	LE	Lecture

Spring 2008	EE481W	481W	Writing in EE 481	EE	Electrical Engineering	0	Required writing component for EE 481.	UG	LB	Lab
Spring 2008	EE482	482	EE Sr. Design Project II	EE	Electrical Engineering	3	A project-oriented design course integrating design methodology with the principles of major electrical engineering disciplines. The course involves project planning and management, design specifications, implementation, testing and evaluations, electronic documentation, written and oral reports.	UG	LE	Lecture
Spring 2008	EE482W	482W	Writing in EE 482	EE	Electrical Engineering	0		UG	LB	Lab
Spring 2008	EE499	499	Special Problems in EE	EE	Electrical Engineering	1	Special problems in advanced engineering. Topics vary.	UG	IS	Independent Study
Spring 2008	EE499W	499W	Writing in EE 499	EE	Electrical Engineering	0		UG	LB	Lab
Spring 2008	EE501	501	Circuit Analysis I	EE	Electrical Engineering	4	Basic elements and laws, circuit analysis techniques and concepts, energy storage elements, first and second order circuits, sinusoidal steady state analysis.	GR	LE	Lecture

Spring 2008	EE502	502	Circuit Analysis I Lab	EE	Electrical Engineering	1	Computer-assisted analysis, RLC circuits, operational amplifiers and circuits, Thevenin and Norton equivalents, maximum power transfer, AC networks.	GR	LB	Lab
Spring 2008	EE503	503	Circuit Analysis II	EE	Electrical Engineering	3	Circuit review, alternating current concepts, computer-aided circuit analysis, two-port networks, power.	GR	LE	Lecture
Spring 2008	EE504	504	Circuit Analysis II Lab	EE	Electrical Engineering	1	Application of AC concepts, computer-aided circuit analysis, two-port networks, and power theory.	GR	LB	Lab
Spring 2008	EE521	521	Linear Systems I	EE	Electrical Engineering	4	Considers systems in a broad context including linear, nonlinear; variant, invariant; and analog and discrete. Approaches to system and signal modeling are discussed with emphasis on the Fourier transform technique.	GR	LE	Lecture
Spring 2008	EE522	522	Linear Systems II	EE	Electrical Engineering	4	Covers discrete time signals and systems, the z-Transform, input/output theory and discrete Fourier transform, IIR and FIR filter design, relationships, and sampling.	GR	LE	Lecture

Spring 2008	EE526	526	Random Signals and Noise	EE	Electrical Engineering	4	Provides a practical introduction to the concepts of random events, characterization of stochastic signals, first and second order moment descriptions of random processes, and input/output descriptions of random signals and noise in linear systems. Prerequisite: EE 321.	GR	LE	Lecture
Spring 2008	EE531	531	Electronic Devices	EE	Electrical Engineering	3	Introduction to basic solid-state electron devices. Fundamentals necessary for comprehension and further study of modern engineering electronics. Major topics include carrier flow in semiconductors, p-n junction theory, semiconductor diodes, bipolar junction transistors, field-effect transistors, biasing, and introduction to amplifiers.	GR	LE	Lecture
Spring 2008	EE532	532	Electronic Devices Lab	EE	Electrical Engineering	1	Applications of diodes and transistors in analog circuits, design of bias circuits transistors.	GR	LB	Lab
Spring 2008	EE545	545	Electromagnetics	EE	Electrical Engineering	4	Developments in the basic concepts of vector calculus and their application to electromagnetics, electrostatics, and magnetics; induced electromotive force; and Maxwell s equations and their physical interpretation and application.	GR	LE	Lecture

Spring 2008	EE546	546	Tran Lines Waveguides Ant	EE	Electrical Engineering	4	Plane waves in free space and matter. Transmission line equations and application of Smith chart. Wave propagation in rectangular waveguides. Introduces radiating systems including the dipole and loop antennas. Rudimentary design of typical systems containing transmission lines, waveguides, and antennas.	GR	LE	Lecture
Spring 2008	EE610	610	Introduction to MEMS	EE	Electrical Engineering	4	This course covers the history, design, and fabrication of micro-electro-mechanical systems (MEMS), and the basic operating theory of selected MEMS transducers. Typical fabrication methods covered include surface micromachining, bulk micromachining, and micromolding.	GR	LE	Lecture
Spring 2008	EE613	613	Control Systems I	EE	Electrical Engineering	3	(Also listed as BMS 710.) Provides students with a general control background. Major topics include block diagrams and signal-flow graphs, electromechanical modeling including state variable representation, time response, root locus, and introduction to design.	GR	LE	Lecture
Spring 2008	EE614	614	Control Systems I Lab	EE	Electrical Engineering	1	(Also listed as BMS 711.) Application and testing of control systems theory with electromechanical systems.	GR	LB	Lab

Spring 2008	EE615	615	Control Systems II	EE	Electrical Engineering	3	(Also listed as BMS 712.) Utilizing Control Systems I background, this course concentrates on controller design in both the time and frequency domains, using Nyquist, Bode, and root locus techniques.	GR	LE	Lecture
Spring 2008	EE616	616	Control Systems II Lab	EE	Electrical Engineering	1	(Also listed as BMS 713.) Application and testing of control systems theory with electromechanical systems.	GR	LB	Lab
Spring 2008	EE617	617	Digital Control Systems	EE	Electrical Engineering	3	Covers sampled spectra and aliasing, analysis and design of digital control systems using root locus and transform techniques; discrete equivalents of continuous controller and quantization effects, introduction to programmable logic controllers. 3 hours lecture, 4 hours lab.	GR	LE	Lecture
Spring 2008	EE618	618	Control Sys Desgn Proj	EE	Electrical Engineering	4	A project-oriented design course, integrating design methodology with the principles of controller design developed in previous courses. Topics include project planning, system specs, documentation, design reviews, written and oral reports, and system test. 2 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	EE618L	618L	Control Sys Des Proj Lab	EE	Electrical Engineering	0	Required laboratory for EE 618.	GR	LB	Lab

Spring 2008	EE619	619	Fuzzy Logic Control	EE	Electrical Engineering	4	(Also listed as CEG 619.) Foundations and philosophy of fuzzy logic and applications to control theory. Relationship between classical PID control and fuzzy rule-based control. Techniques for rule construction and adaptive fuzzy logic controllers. Case studies of fuzzy logic control applications. (3 hours lecture and 2 hours lab.)	GR	LE	Lecture
Spring 2008	EE619L	619L	Fuzzy Logic Cntrl Lab	EE	Electrical Engineering	0	Required laboratory for EE 619.	GR	LB	Lab
Spring 2008	EE620	620	Digitl Contrl Sys Lab	EE	Electrical Engineering	1	Sampling, temperature control on a microprocessor-based system, PLC implementation, quantization error computational delay, frequency response.	GR	LB	Lab
Spring 2008	EE621	621	Digital Communication	EE	Electrical Engineering	4	Analysis of communication systems using the Fourier transform and the convolution integral. Discussion of Nyquist's sampling theorem and an introduction to binary pulse code modulation (PCM). Various analog (AM, SSB, WBFM) and digital (BPSK, AK, FSK) modulation techniques are also discussed and analyzed.	GR	LE	Lecture

Spring 2008	EE631	631	Electronic Circuits	EE	Electrical Engineering	3	Theory and application of basic engineering electronics developed for discrete and integrated circuits. Topics include bipolar and field effect transistor amplifier analysis and design, frequency response, multistage and feedback amplifiers.	GR	LE	Lecture
Spring 2008	EE632	632	Electronic Circuits Lab	EE	Electrical Engineering	1	Design of single and multiple stage amplifier circuits, feedback amplifiers, circuits to meet frequency response specifications and output stages.	GR	LB	Lab
Spring 2008	EE635	635	Analog & Digital Filters	EE	Electrical Engineering	4	Filter theory and approximation. Synthesis of active-RC and switched capacitor filters. Sensitivity analysis and design-centering concepts.	GR	LE	Lecture
Spring 2008	EE636	636	Digital Signal Processing	EE	Electrical Engineering	4	Introduces principles and applications of digital signal processing (DSP) from the design and implementation perspective. Topics include analog to-digital/digital-to-analog converters and digital filters, Fourier analysis algorithms, and real-time applications all implemented on a TMS 320C30 floating Point DSP Chip.	GR	LE	Lecture
Spring 2008	EE636L	636L	Digital Sig Proc Lab	EE	Electrical Engineering	0	Required laboratory for EE 636.	GR	LB	Lab

Spring 2008	EE637	637	Modern Signal Processing	EE	Electrical Engineering	4	Introduction to advanced digital signal processing design concepts. Focus on time and frequency domain algorithms. Methods include multirate signal processing, filter banks, time-frequency analysis, and wavelets. Examples taken from audio signal processing.	GR	LE	Lecture
Spring 2008	EE640	640	Intro Nanosci/Nanotech	EE	Electrical Engineering	4	Introduction to nanoscience and nanotechnology. Topics include introduction tp quantum mechanics, fabrication, characterization, materials, electronic properties, optical properties, magnetic properties, devices, MEMS and NEMS.	GR	LE	Lecture
Spring 2008	EE640L	640L	Lab	EE	Electrical Engineering	0		GR	LB	Lab
Spring 2008	EE644	644	Linear Integrated Circuits	EE	Electrical Engineering	4	Theory and applications of linear integrated circuits. Topics include ideal and real operational amplifiers, frequency response and compensation, active filters, comparators, and waveform generators. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	EE644L	644L	Linear Integ Circuits Lab	EE	Electrical Engineering	0	Required laboratory for EE 644.	GR	LB	Lab

Spring 2008	EE645	645	EM Compatibility	EE	Electrical Engineering	4	Identification of possible sources of electromagnetic interference (EMI) in an electronic device or system. Fundamental EMC design principles concerning conducted and radiated emissions, reduction of susceptibility to EMI and EMI shielding.	GR	LE	Lecture
Spring 2008	EE646	646	Microwave Circuit Design	EE	Electrical Engineering	4	Review of Smith chart, introduction to microstrip lines, impedance matching, power-gain equations, stability considerations, and design methods for amplifiers and oscillators. CAD (Touchstone software by EESOF) is used.	GR	LE	Lecture
Spring 2008	EE647	647	Antenna Theory & Desgn	EE	Electrical Engineering	4	Computer-aided design and analysis of wire antennas, feed networks, and antenna arrays using antenna CAD software. Covers linear dipole antennas, antenna arrays, thin-wire antennas, moment method analysis (vee dipole, folded dipole, etc.), broadband and frequency-independent antennas.	GR	LE	Lecture

Spring 2008	EE648	648	RF/Microwave Sys Design	EE	Electrical Engineering	4	A project-oriented design course, integrating design methodology with the principles of microwave circuit analysis and electromagnetic wave propagation, developed in previous courses. Formal documentation, design reviews, and reporting are required.	GR	LL	Lecture/Lab Combination
Spring 2008	EE649	649	Pulse and Digital Circuit	EE	Electrical Engineering	4	Design, analysis, and application of pulse and switching circuits using both Field Effect Transistors (FETS) and Bipolar Junction Transistors (BJTS). Transistor level design of digital integrated circuits including NMOS, CMOS, TTL, and ECL logic families. Design of digital interface and buffer circuits. Transmission line effects in digital applications. 3 hours lecture, 3 hours lab.	GR	LE	Lecture
Spring 2008	EE649L	649L	Pulse & Digital Cir Lab	EE	Electrical Engineering	0	Required laboratory for EE 649.	GR	LB	Lab
Spring 2008	EE651	651	Digital Systems Design	EE	Electrical Engineering	4	(Also listed as CEG 560.) Topics include flip-flops, registers, counters, programmable logic devices, memory devices, register-level design, and microcomputer system organization. Student must show competency in the design of digital systems. 3 hours lecture, 2 hours lab.	GR	LE	Lecture

Spring 2008	EE651L	651L	Digital Systems Desgn Lab	EE	Electrical Engineering	0	Required laboratory for EE 651.	GR	LB	Lab
Spring 2008	EE654	654	VLSI Design	EE	Electrical Engineering	4	(Also listed as CEG 654.) Introduction to VLSI system design. Topics include CMOS devices and circuit design techniques, basic building blocks for CMOS design, fabrication processing and design rules, chip planning and layout, system timing and power dissipation, simulation for VLSI design, and signal processing with VLSI.	GR	LE	Lecture
Spring 2008	EE654L	654L	VLSI Design Lab	EE	Electrical Engineering	0	Required laboratory for EE 654.	GR	LB	Lab
Spring 2008	EE655	655	VLSI Cir Desgn Proj	EE	Electrical Engineering	4	A project-oriented design course, integrating design methodology with principles of integrated circuit design developed in previous courses. Focus is an integrated circuit design project including the topics of project selection, planning and management, system specification, documentation, design reviews, written and oral reports, and testing. 2 hours lecture, 4 hours lab.	GR	LE	Lecture
Spring 2008	EE655L	655L	Elec Cir Desgn Proj Lab	EE	Electrical Engineering	0	Required laboratory for EE 655.	GR	LB	Lab

Spring 2008	EE656	656	Intro to Robotics	EE	Electrical Engineering	4	(Also listed as CEG 656 and ME 656.) Introduction to the mathematics, programming, and control of robots. Topics covered include coordinate systems and transformations, manipulator kinematics and inverse kinematics, trajectory planning, Jacobians, and control. Prerequisite: MTH 253; proficiency in Pascal, C, or FORTRAN programming.	GR	LE	Lecture
Spring 2008	EE656L	656L	Intro to Robotics Lab	EE	Electrical Engineering	0	Required laboratory for EE 656.	GR	LB	Lab
Spring 2008	EE658	658	Ckt Dsgn w PLDs & FPGAs	EE	Electrical Engineering	4	(Also listed as CEG 658.) Design and application of digital integrated circuits using programmable logic devices (PLDs) and field programmable gate arrays (FPGAs). A commercial set of CAD tools (Mentor Graphics and Xilinx) are used in the lab portion of the course.	GR	LE	Lecture
Spring 2008	EE658L	658L	Ckt Des/PLDs & FPGAs Lab	EE	Electrical Engineering	0	Required laboratory for EE 658.	GR	LB	Lab

Spring 2008	EE659	659	Circuit Desgn with VHDL	EE	Electrical Engineering	4	(Also listed as CEG 659.) Application of VHSIC hardware description language (VHDL) to the design, analysis, multi-level simulation, and synthesis of digital integrated circuits. A commercial set of CAD tools (Mentor Graphics) are used in the lab portion of the course.	GR	LE	Lecture
Spring 2008	EE659L	659L	Ckt Desgn with VHDL Lab	EE	Electrical Engineering	0	Required laboratory for EE 659.	GR	LB	Lab
Spring 2008	EE662	662	Ckt Dsgn w PLDs & FPGAs	EE	Electrical Engineering	4	(Also listed as CEG 658.) Design and application of digital integrated circuits using programmable logic devices (PLDs) and field programmable gate arrays (FPGAs). A commercial set of CAD tools (Mentor Graphics and Xilinx) are used in the lab portion of the course.	GR	LE	Lecture
Spring 2008	EE662L	662L	Ckt Des/PLDs & FPGAs Lab	EE	Electrical Engineering	0	Required laboratory for EE 662.	GR	LB	Lab
Spring 2008	EE670	670	Introduction to Sensors	EE	Electrical Engineering	4	An overview of basic sensor technology to provide the engineering student with practical working knowledge of sensors. Course will include basic sensor operating priniples, basic electronics and measurement principles.	GR	LE	Lecture

Spring 2008	EE670L	670L	Introduction to Sensors Lab	EE	Electrical Engineering	0		GR	LB	Lab
Spring 2008	EE673	673	Wireless Communication I	EE	Electrical Engineering	4	Probability concepts are reviewed and extended to treat random process theory. Probability techniques are then used to introduce the essential ideas of information theory. The baseband digital PCM technique is covered in detail and the most important digital RF modems are also considered. Brief introduction to communication networks provided. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	EE673L	673L	Commun Sys Desgn I Lab	EE	Electrical Engineering	0	Required laboratory for EE 673.	GR	LB	Lab
Spring 2008	EE674	674	Wireless Commun Sys Lab	EE	Electrical Engineering	1	Hands on experience of wireless communication systems. Topics include: analog and digital modulation and demodulation(AM, FM, BPSK, QPSK, etc.) frequency-flat, and frequency-selective fading, equalization, deiveristy, BER performance of digital wireless communication.	GR	LB	Lab

Spring 2008	EE675	675	Intro to Radar Systems	EE	Electrical Engineering	4	Introductory study of the radar equation, antenna patterns, target cross sections and system losses, radar measurements, pulse doppler and coherent techniques, detection probability and signal-to-noise ratio, sidelobe clutter, synthetic arrays, and pulse compression techniques.	GR	LE	Lecture
Spring 2008	EE676	676	Wireless Communication II	EE	Electrical Engineering	4	A project-oriented communication and signal processing design course involving a problem definition stage, an analysis and design stage, and a final implementation stage. Specific topics include project selection, planning and management, system specification, design reviews, written and oral reports, and final system testing. 2 hours lecture, 4 hours lab.	GR	LE	Lecture
Spring 2008	EE676L	676L	Com/Sig Proc Des Prj Lab	EE	Electrical Engineering	0	Required laboratory for EE 676.	GR	LB	Lab
Spring 2008	EE678	678	Coding Theory	EE	Electrical Engineering	3	(Also listed as MTH 656 and CEG 678.) Introduction to the essentials of error-correcting codes, the study of methods for efficient and accurate transfer of information. Topics covered include basic concepts, perfect and related codes, cyclic codes, and BCH codes.	GR	LE	Lecture

Spring 2008	EE680	680	Selected Topics in EE	EE	Electrical Engineering	1	Topics and prerequisites vary.	GR	LE	Lecture
Spring 2008	EE699	699	Special Problems in EE	EE	Electrical Engineering	1	Special problems in advanced engineering topics. Titles vary. May be taken for a letter grade of pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	EE700	700	Prin of Instruct in Egr	EE	Electrical Engineering	3	Survey of available instructional materials and discussion of educational theories and techniques leading to more effective instruction. For first-year graduate teaching assistants only. Graded pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	EE701	701	Linear Systems	EE	Electrical Engineering	4	(Also listed as EGR 701 and BMS 705.) Signal representation, orthonormal bases, and generalized Fourier series. Description of linear, discrete, and continuous systems. Systems analysis via classical equations, convolution, and transform methods.	GR	LE	Lecture
Spring 2008	EE702	702	Linear Systems II	EE	Electrical Engineering	3	(Also listed as BMS 706.) State variable representations of continuous and discrete systems. Linear vector spaces and similarity transformations; eigen-analysis, time and transform domain solutions of linear state equations; controllability, observability, and stability of linear systems.	GR	LE	Lecture

Spring 2008	EE708	708	Adv Micro-Electro Mech Sys	EE	Electrical Engineering	4	Classical and advanced micro-sensing and actulation methods and techniques. Analytical and finite element methods utilized in investigating MEMS devices. Computed results compared to experimental findings. Specific MEMS application areas explored.	GR	LE	Lecture
Spring 2008	EE710	710	Digital Signal Processing	EE	Electrical Engineering	4	Data acquisition and quantization, unitary transforms, circular convolution, Hilbert transform, FIR/IIR filter design and realization, analysis of finite-precision numerical effects, spectral estimation, and Cepstrum analysis.	GR	LE	Lecture
Spring 2008	EE711	711	Multidim Dig Sig Process	EE	Electrical Engineering	3	Topics of EE 710 extended to multidimensional systems and signals. Provides the theoretical and applied basis for analysis and synthesis of discrete systems and operations used in digital images, transducer arrays, and other multidimensional signals.	GR	LE	Lecture

Spring 2008	EE715	715	Digital Image Processing	EE	Electrical Engineering	4	Image representation, sampling/quantization, spatial/frequency concepts, image enhancement, color image theory, unitary image transforms, image data compression, image models, image coding, image restoration, feature extraction and description, and computer implementation of concepts and algorithms introduced.	GR	LE	Lecture
Spring 2008	EE716	716	Kalman Filters & Estmtn	EE	Electrical Engineering	4	Least square estimation, minimum mean square error estimation, maximum likelihood estimation, maximum a posteriori estimation, consistency testing, Kalman filters, extended Kalman filters, iterated extended Kalman filters, a-b-r filters, adaptive estimation, Monte Carlo simulations and case studies.	GR	LE	Lecture
Spring 2008	EE717	717	Multisensor/Data Fusion	EE	Electrical Engineering	4	Multisensor/data integration. Sensor characteristics, management, modeling, and coordination. Statistical, Bayesian and Fisher, weighted least-square, dynamic distributed and centralized, rule-based and adaptive sensor fusion. Demptster-Shafer technique. Fusion by Markov random fields. Neural network and fuzzy logic applications.	GR	LE	Lecture

Spring 2008	EE718	718	Multitarget Tracking	EE	Electrical Engineering	4	Multitarget tracking and data association. Linear and nonlinear state estimation. Maneuvering targets. Single target and multitarget tracking in clutter. Joint probabilistic data association filter. Multiple hypothesis and distributed multitarget tracking. Track-to-track fusion.	GR	LE	Lecture
Spring 2008	EE720	720	Advanced Digital Control	EE	Electrical Engineering	3	Analysis and design of digital control systems using the state approach, multirate digital control systems, and digital state observer and microprocessor control.	GR	LE	Lecture
Spring 2008	EE725	725	Princ Mod Control Theory	EE	Electrical Engineering	3	Calculus of variations for continuous processes. Euler-Lagrange equations and the use of Lagranger multipliers; Pontryagin's maximum principle, Hamilton-Jacobi theory; and application to control examples.	GR	LE	Lecture
Spring 2008	EE733	733	Modern Radar Theory	EE	Electrical Engineering	4	Application of probability and random process to the performance characterization of range/doppler radar. Development of the concepts of resolution, S/N, ambiguity function, and pulse compression, and their applications to radar systems design. Consideration is also given to coherent imaging radar.	GR	LE	Lecture

Spring 2008	EE735	735	Wireless Com Techniques	EE	Electrical Engineering	4	Wireless Generations (1G, 2G, and 3G) and Standards, Wireless LAN's (Bluetooth), the Cellular concept - channel allocation and hand-off strategies, capacity of Cellular systems - Cell Splitting, Sectoring, Trunking and Grade of Service. Matched Filters and basic detection Theory, Analog and Digital Modulation techniques used in commercial Wireless systems - FM, DPSK, QPSK, /4-QPSK, OPSK, MSK, GMSK, and OFDM. M-ary modulation, Multiple-access techniques, Path loss in wireless channels, Large Scale and Small Scale Path Loss - Rayleigh and Rician Fading; Multipath and Doppler, Computer simulation of digital communication techniques, Computer Simulation of fading channels. Prerequisite: EE 761 or equivalent.	GR	LE	Lecture
Spring 2008	EE736	736	Advance Wireless Com Tech	EE	Electrical Engineering	4	Fading Counteraction including ISI mitigation and Adaptive Equaliztion, Diversity, Coding and Interleaving for error correction, Speech Coding, Multiplexing and Multiple Access techniques including TDMA, FDMA, and CDMA; OFDM, CDMA, Wireless Networking, Packet Radio, Wireless LAN's including Bluetooth.	GR	LE	Lecture

Spring 2008	EE737	737	Dig Spread Spectum Sys	EE	Electrical Engineering	4	The principles of spread spectrum systems are introduced emphasizing applications. Techniques of both direct sequence and frequency hopping systems will be emphasized. PN sequences, processing gain, interference rejection, multiple access, and navigation will be discussed.	GR	LE	Lecture
Spring 2008	EE738	738	Communication Networks	EE	Electrical Engineering	4	Analysis and simulation of networks, including both LANs and WANs. Dependence of network throughput, latency, average delay, robustness on network protocol, routing, flow control, and traffic dynamics as modeled by queuing theory. Required design project based on COMNETIII software.	GR	LE	Lecture
Spring 2008	EE740	740	Information Theory	EE	Electrical Engineering	4	Development of communication channel model and use of information theory as means of quantifying that model. Investigation of various error correcting and detecting codes. The popular Viterbi coding algorithm is also considered.	GR	LE	Lecture

Spring 2008	EE741	741	Power Semiconductor Dev	EE	Electrical Engineering	4	General-purpose, fast-recovery, and Schottky diodes; performance parameters: power BJTs, MOSFETs, and MOSIFTs; static and dynamic characteristics, drivers, pulse transformers, and optocouples; thyristor characteristics, SGR, and GTO parameters; cooling, snubbers, voltage and current protection, and varistors.	GR	LE	Lecture
Spring 2008	EE742	742	Power Electronics II	EE	Electrical Engineering	4	AC-to-DC converters, natural and forced thyristor commutations, controlled rectifiers, power factor improvements, static AC and DC switches, AC voltage controllers, output harmonic reduction, DC choppers, characteristics of DC-to-AC inverters, PWM and FM control.	GR	LE	Lecture
Spring 2008	EE743	743	Power Electronics III	EE	Electrical Engineering	4	Power factor correction under nonlinear load conditions, harmonic reduction, utility line disturbances, uninterruptible power supplies, international standards on electromagnetic pollution, low-frequency inverters, residential and industrial applications of power electronics, and characteristics of electric energy storage components. Course includes an independent project.	GR	LE	Lecture

Spring 2008	EE743L	743L	Power Elect III Lab	EE	Electrical Engineering	0	Required laboratory for EE 743.	GR	LB	Lab
Spring 2008	EE746	746	EM Simul Meth I: FDTD	EE	Electrical Engineering	4	Direct solution of Maxwell's differential equations in the time domain using the finite-difference time-domain (FTDT) method. Absorbing boundary conditions and waveguide or plane wave excitation methods. Application to the solution of problems relevant to radiation, radar cross section (or scattering) and microwave circuit design.	GR	LE	Lecture
Spring 2008	EE747	747	EM Simul Methods II: MoM	EE	Electrical Engineering	4	Wave equation and integral formulations for electromagnetic (EM) problems. Methods of moments (MoM) and its implementation. Application of one-and two-dimensional EM problems. Comparison with the finite element method.	GR	LE	Lecture
Spring 2008	EE752	752	VLSI Subsystem Design	EE	Electrical Engineering	4	(Also listed as CEG 752.) CMOS VLSI subsystems including data path operators, counters, multipliers, memory elements, and programmable logic arrays. VLSI circuits for FIR and IIR filters. VLSI circuits for digital data exchange systems. 3 hours lecture, 2 hours lab.	GR	LE	Lecture

Spring 2008	EE752L	752L	VLSI I Lab	EE	Electrical Engineering	0	Required laboratory for EE 752.	GR	LB	Lab
Spring 2008	EE753	753	VLSI Synthesis/Optimiz	EE	Electrical Engineering	4	(Also listed as CEG 753.) VLSI architectural-level synthesis and optimization including data path synthesis, control-units synthesis, scheduling, and resource sharing. Logic-level synthesis and optimization including two-level and multi-level combinational logic optimization, and sequential logic optimization. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	EE753L	753L	VLSI Synthes/Optimiz Lab	EE	Electrical Engineering	0	Required laboratory for EE 753.	GR	LB	Lab
Spring 2008	EE754	754	VLSI Testing/Testability	EE	Electrical Engineering	4	(Also listed as CEG 754.) Design for testability of VLSI circuits. Topics include importance of testing, conventional test methods, built-in test, CAD tools for evaluating testability, test pattern generators and compressors.	GR	LE	Lecture
Spring 2008	EE754L	754L	VLSI Test/Testability Lab	EE	Electrical Engineering	0	Required laboratory for EE 754.	GR	LB	Lab

Spring 2008	EE756	756	Robotics I	EE	Electrical Engineering	4	(Also listed as CEG 756 and ME 756.) Detailed study of the dynamics and control of robotic systems and robot programming languages and systems. Material covered includes rigid-body dynamics; linear, nonlinear, adaptive, and force control of manipulators; and robot programming languages.	GR	LE	Lecture
Spring 2008	EE756L	756L	Robotics Lab	EE	Electrical Engineering	0	Required laboratory for EE 756.	GR	LB	Lab
Spring 2008	EE757	757	Robotics II	EE	Electrical Engineering	4	An introduction to sensing, vision, and robot intelligence and task planning. Material covered includes sensors, low-level and higher level vision techniques, task planning including obstacle avoidance and artificial intelligence and expert systems as applied to robotic systems.	GR	LE	Lecture
Spring 2008	EE757L	757L	Robotics II Lab	EE	Electrical Engineering	0	Required laboratory for EE 757.	GR	LB	Lab

Spring 2008	EE758	758	CMOS Analog IC Design	EE	Electrical Engineering	4	(Also listed as CEG 758.) Introduction to the techniques, limitations, and problems in the design of CMOS analog integrated circuits. Topics include CMOS analog circuit modeling and device characterization, analog CMOS subcircuits, CMOS amplifiers, comparators, and CMOS Op Amps. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	EE758L	758L	CMOS Analog IC Des Lab	EE	Electrical Engineering	0	Required laboratory for EE 758.	GR	LB	Lab
Spring 2008	EE759	759	CMOS Radio Freq Circ Design	EE	Electrical Engineering	4	Introduction to the design of Radio Frequency Integrated Circuits using CMOS technology. Topics include noise sources in RF Integrated Circuits, low noise RF amplifiers, RF mixers, RF oscillators and synthesizers and phase lock loops.	GR	LL	Lecture/Lab Combination
Spring 2008	EE761	761	Random Processes	EE	Electrical Engineering	4	Probability and random variable, distributions and density functions, random processes, strict-sense and wide-sense stationarity, auto-correlation and power spectral density, ergodicity, response of linear systems with stochastic inputs, discrete linear models, and Gaussian processes.	GR	LE	Lecture

Spring 2008	EE762	762	Detec, Est & Opt Filt Thry	EE	Electrical Engineering	3	Binary detection with single/multiple observations, linear minimum mean-square error filtering: Wiener and Kalman filters, MLE and MAP estimators, histogram, tests of hypotheses, regression analysis, model-free and model-based parameter estimation of random processes.	GR	LE	Lecture
Spring 2008	EE763	763	Cls & Mod Spectral Analy	EE	Electrical Engineering	3	Linear and matrix algebra, periodgram and Blackman-Tukey estimators, moving average, auto regressive and auto-regressive moving-average methods, fast techniques, statistics of estimators, model order selection, and minimum variance and high-resolution techniques.	GR	LE	Lecture
Spring 2008	EE789	789	Continuing Registration	EE	Electrical Engineering	1		GR	IS	Independent Study
Spring 2008	EE830	830	Nonlinear Systems	EE	Electrical Engineering	3	Nonlinear elements and their effects in physical systems, phase plane, linearization techniques, describing functions, Liapunov stability, absolute stability and Popov's theorem.	GR	LE	Lecture

Spring 2008	EE831	831	Robust Controls	EE	Electrical Engineering	3	Study of several important topics from recent research in robust-control design. Topics include review of LQR and state feedback designs; Kharitonovfs theorem; Barmishfs theorem; Wei-Yedavallifs theorem; edge theorem; and elements of H control.	GR	LE	Lecture
Spring 2008	EE861	861	Adaptive Filters	EE	Electrical Engineering	4	Introduction to adaptive systems, adaptation with stationary signals, and to adaptive algorithms and structures. Applications to systems identification, deconvolution, equalization, control systems, interference canceling, adaptive arrays, and beam forming are considered.	GR	LE	Lecture
Spring 2008	EE880	880	Select Topics in Sys EE	EE	Electrical Engineering	1	Selected topics in current research and recent developments in systems theory and engineering. Titles vary.	GR	LE	Lecture
Spring 2008	EE890	890	Special Problems in EE	EE	Electrical Engineering	1	Special problems in advanced engineering topics. Titles vary.	GR	IS	Independent Study
Spring 2008	EE898	898	PhD Dissertation Research	EE	Electrical Engineering	1	Research on the Ph.D. dissertation topic. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	EE899	899	Thesis	EE	Electrical Engineering	1	Graded pass/unsatisfactory.	GR	IS	Independent Study

Spring 2008	EES105	105	The Planet Earth	EES	Earth & Environmental Sciences	4	Introduction to earth materials, their arrangement (structure), and the changes they undergo (geologic processes). Study of the common minerals and rocks and interpretation of topographic mags. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	EES105L	105L	The Planet Earth Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 105.	UG	LB	Lab
Spring 2008	EES105W	105W	Writing in EES 105	EES	Earth & Environmental Sciences	0	Writing in EES 105.	UG	LB	Lab
Spring 2008	EES106	106	The Evolving Earth	EES	Earth & Environmental Sciences	4	Exploration of geological past with some emphasis on North America through interpretation of fossil record. Three hours lecture, 2 hours lab. Recommended preparation: EES 105.	UG	LE	Lecture
Spring 2008	EES106L	106L	The Evolving Earth Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 106.	UG	LB	Lab
Spring 2008	EES106W	106W	Writing in EES 106	EES	Earth & Environmental Sciences	0	Writing in EES 106.	UG	LB	Lab

Spring 2008	EES107	107	The Earth and Human Affairs	EES	Earth & Environmental Sciences	4	Introduction to geologic hazards, resources and environmental science, demonstrating the interaction of human society with the geologic environment. Three hours lecture and two hours lab. Recommended preparation: EES 105.	UG	LE	Lecture
Spring 2008	EES107L	107L	The Earth and Human Affair Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 107.	UG	LB	Lab
Spring 2008	EES107W	107W	Writing in EES 107	EES	Earth & Environmental Sciences	0	Writing in EES 107.	UG	LB	Lab
Spring 2008	EES111	111	Physical Geology Honors I	EES	Earth & Environmental Sciences	4.5	Comprehensive treatment of the dynamic systems and materials of the earth. External processes and resulting land forces are also studied. Three hours lecture, three hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	EES112	112	Physical Geology Honors II	EES	Earth & Environmental Sciences	4.5	Comprehensive treatment of external and internal processes of the earth and the resulting landforms. Introduction to earth resources and other earth-like plants. Three hours lecture, three hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	EES113	113	Historical History - Honors	EES	Earth & Environmental Sciences	4.5	Summary of current thought about the earth's history from its origin to the present. Topics include movement and evolution of the earth's crust, world climatic changes, and evolution of plants and animals. Three hours lecture, three hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	EES120	120	Hon Geol Phy Hist Field	EES	Earth & Environmental Sciences	12	Offers the equivalent of a three-quarter introductory geology sequence to honors students during one summer. Five weeks of double lectures and labs are followed by a five-week field trip to the northern Rocky Mountains.	UG	LL	Lecture/Lab Combination
Spring 2008	EES199	199	Directed Studies	EES	Earth & Environmental Sciences	1	Research and problems related to specific needs and talents of students.	UG	IS	Independent Study
Spring 2008	EES199W	199W	Writing in EES 199	EES	Earth & Environmental Sciences	0	Writing in Directed Studies, EES 199.	UG	LB	Lab
Spring 2008	EES201	201	Hydrology & Water Resources	EES	Earth & Environmental Sciences	4	Hydrology and the distribution and availability of water resources; natural and anthropogenic processes that influence flood and water quality. 3 hours lecture and 2 hours lab. Some lectured are web-based.	UG	LE	Lecture
Spring 2008	EES201L	201L	Water Resources Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 201.	UG	LB	Lab

Spring 2008	EES251	251	Physical Gl & Geomorph	EES	Earth & Environ mental Sciences	3	Comprehensive treatment of the dynamic systems and materials of the earth. External processes and resulting land forces are also studied.	UG	LE	Lecture
Spring 2008	EES252	252	Phy Gl & Geomorph Lab I	EES	Earth & Environ mental Sciences	1.5	Laboratory for mineral and rock identification in hand specimens.	UG	LB	Lab
Spring 2008	EES253	253	Physical Gl & Gelmorph II	EES	Earth & Environ mental Sciences	3	Comprehensive treatment of external and internal processes of the earth and the resulting landforms. Introduction to earth resources and other earth-like plants.	UG	LE	Lecture
Spring 2008	EES253W	253W	Writing in EES 253	EES	Earth & Environ mental Sciences	0	Writing in Physical Geology and Geomorphology II.	UG	LB	Lab
Spring 2008	EES254	254	Phy Gl & Geomorph Lab II	EES	Earth & Environ mental Sciences	1.5	Laboratory for topographic and geologic map and geologic cross sections interpretation to recognize geological structures and their relation to geomorphology and landforms.	UG	LB	Lab
Spring 2008	EES255	255	Historical Geology	EES	Earth & Environ mental Sciences	3	History of the earth, including geologic history of all of earth's continents. Review a origin of earth, development of the rock record, evoluation of diverse life forms to produce a biological and physical history of the earth.	UG	LE	Lecture

Spring 2008	EES255W	255W	Writing in EES 255	EES	Earth & Environmental Sciences	0		UG	LB	Lab
Spring 2008	EES256	256	Historical Geology Lab	EES	Earth & Environmental Sciences	1.5	Introduction to the fossil record, stratigraphic correlation, and the interpretation of simple geologic maps.	UG	LB	Lab
Spring 2008	EES260	260	Environmental Sci & Soc	EES	Earth & Environmental Sciences	4	This course provides students with facts necessary to understand environmental problems and the ethical, social, political, and technological bases for their solution-using examples from many cultures from around the world.	UG	LE	Lecture
Spring 2008	EES304	304	Earth Res & Env Quality	EES	Earth & Environmental Sciences	3	Study of earth resources as the economic base of civilization. Natural geologic processes and geochemical cycles of global change are compared with human-induced impact on environment. Emerging trends in technology and policy matters and their influence on environmental quality are analyzed.	UG	LE	Lecture
Spring 2008	EES304L	304L	Earth Resources Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 304.	UG	LB	Lab

Spring 2008	EES308	308	Paleo and Strat of Ohio	EES	Earth & Environ mental Sciences	4	The geology of Ohio is explored. Field trips provide an understanding of the various rock formations, the history of life preserved in their fossils, and their importance to the economy of the state.	UG	LE	Lecture
Spring 2008	EES309	309	Gl Hazard & Envirn Qual	EES	Earth & Environ mental Sciences	4	Hazards from geologic materials; reactive minerals, the asbestos controversy, radioactive and toxic gases. Hazards from geologic processes, earthquakes, volcanic eruptions, slope processes, subsidence, floods and coastal hazards. Geologic hazards monitoring, mitigation and avoidance. Risk evaluation. Three hours lecture, two hours lab or field trip.	UG	LE	Lecture
Spring 2008	EES309L	309L	GL Haz & Envirn Qual Lab	EES	Earth & Environ mental Sciences	0	Required laboratory for EES 309.	UG	LB	Lab
Spring 2008	EES310	310	Issues in Science	EES	Earth & Environ mental Sciences	3	(Also listed as BIO 310, CHM 310, PHY 310, and MTH 310). A writing-intensive course dealing with issues in science.	UG	LE	Lecture
Spring 2008	EES312	312	Earth Mat: Minerals and Rocks	EES	Earth & Environ mental Sciences	4.5	Study of the structure, symmetry, and composition of minerals and the composition, classification, and orgin of rocks. Lab emphasizes mineral and rock identification.	UG	LE	Lecture

Spring 2008	EES313	313	Earth Mat'l I: Crystallography	EES	Earth & Environmental Sciences	1	Introduction to symmetry of crystals, crystal structure and crystal morphology.	UG	LB	Lab
Spring 2008	EES314	314	Earth Mat'l II: Sedimentary	EES	Earth & Environmental Sciences	4.5	Introduction to the optical properties of common minerals. Survey of sedimentary rocks in hard specimen, thin section and field occurrence. Three hours lecture, three hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	EES316	316	Earth Mat'l III: Sedimentology	EES	Earth & Environmental Sciences	4.5	Clastic and carbonate sedimentary rocks, their mineralogy, texture, provenance, and classification. Fluid flow sediment transport and depositon, sedimentary structures, and depositional environments. Three hours lecture, three hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	EES318	318	Igneous & Metamorphic Petrolog	EES	Earth & Environmental Sciences	4.5	Origin of igneous and metamorphic rocks. Lab: use of thin sections and hand specimens for mineral identification, rock structures, and classifications. Three hours lecture, three hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	EES324	324	Oceanography	EES	Earth & Environmental Sciences	4	Fundamentals of oceanography for students with an understanding of scientific principles. The course includes content that is needed by earth science teachers. Students will use the Internet and some basic computer applications.	UG	LE	Lecture

Spring 2008	EES345	345	Concepts in Geology	EES	Earth & Environmental Sciences	4.5	Accelerated treatment of principles of physical and historical geology pertinent to teaching students in grade school (K-8). Includes laboratory exercises that will be effective for teaching K-8 students and can be used in a self-contained classroom. Elementary education majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	EES346	346	Earth Systems	EES	Earth & Environmental Sciences	4.5	Investigation of the processes that affect volcanic eruptions, global warming, ice ages, and how they affect the rest of the world. Study of the relationships between the atmosphere, biosphere, geosphere, and hydrosphere.	UG	LE	Lecture
Spring 2008	EES360	360	Water Quality & Treatment	EES	Earth & Environmental Sciences	3	Relationship of physical and biotic environments to design and operation of systems and procedures employed in maintenance and promotion of a quality, healthful human environment. Emphasis on water quality control and waste disposal methods.	UG	LE	Lecture

Spring 2008	EES362	362	Gen Environ Health	EES	Earth & Environmental Sciences	4	Relationship of physical/chemical/biotic environments to design/operation of systems and procedures employed in maintenance/promotion of quality, healthful human environments. Emphasized: food/dairy sanitation, solid waste, institutional/housing/recreational sanitation, and vector control.	UG	LE	Lecture
Spring 2008	EES364	364	Solid & Haz Waste Mgt	EES	Earth & Environmental Sciences	3	Examines the fundamentals of solid, infectious, and hazardous waste management. Topics covered include regulatory history, regulatory processes, environmental audits, requirements for wast generators, transporters, treatment/storage/disposal facilities, and pollution prevention concepts.	UG	LE	Lecture
Spring 2008	EES366	366	Environ Sci Internship	EES	Earth & Environmental Sciences	9	One-quarter internship in a cooperating environmental or public health agency or industrial organization. Supervised by faculty and professional environmentalist. Reports and specific assignments determined in cooperation with internship director. Graded pass/unsatisfactory. For environmental health majors only.	UG	IN	Internship

Spring 2008	EES366W	366W	Writing in EES 366	EES	Earth & Environmental Sciences	0	Required writing compoent for EES 366.	UG	LB	Lab
Spring 2008	EES368	368	Hazardous Waste	EES	Earth & Environmental Sciences	4	Covers the operation of managing hazardous materials and emergency response in the workplace or at spills or hazardous waste sites. Satisfies OSHA training requirement 29 CFR 1910.120.	UG	LE	Lecture
Spring 2008	EES370	370	Hazwoper Refresher	EES	Earth & Environmental Sciences	1	Refresher training covering management of hazardous materials and energy response in the workplace or at spills or hazardous waste sites. Satisfies OSHA training requirement in 40 CFR 1910.120, the OSHA 8 hr. refresher training.	UG	LE	Lecture
Spring 2008	EES399	399	Spec Probl Ear & Env Sci	EES	Earth & Environmental Sciences	1	Research problems for specific needs and talents of students. Topics vary.	UG	IS	Independent Study
Spring 2008	EES401	401	Topics Earth & Env Sci	EES	Earth & Environmental Sciences	1	Advanced Topics of current interest in the earth and environmental sciences. Topics vary. May be taken for a letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	EES403	403	EES Lit&Research Methods	EES	Earth & Environmental Sciences	2		UG	LE	Lecture

Spring 2008	EES405	405	Grnd-Water Monitor & Rem	EES	Earth & Environmental Sciences	4	Principles of groundwater monitoring and cleanup system design. Theory and field practices for monitoring well drilling/installation, lysimeter installation for natural and contaminated groundwater, etc. Field vists to sites with contaminated aquifers undergoing remediation.	UG	LE	Lecture
Spring 2008	EES417	417	Stratigraphy	EES	Earth & Environmental Sciences	4.5	Principles, rules, and techniques of correlation. Relationships between surface and subsurfance correlation. Geologic and geophysical correlation techniques. Three hours lecture, three hours lab.	UG	LE	Lecture
Spring 2008	EES417L	417L	Stratigraphy Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 417.	UG	LB	Lab
Spring 2008	EES419	419	Invertebrate Paleontology	EES	Earth & Environmental Sciences	4.5	Morphology, geologic record, and geographic distribution of major invertebrats groups characterized by significant fossil representation. Three hours lecture, three hours lab.	UG	LE	Lecture
Spring 2008	EES419L	419L	Invertebrate Paleontology Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 486	UG	LB	Lab
Spring 2008	EES419W	419W	Writing in EES 419	EES	Earth & Environmental Sciences	0		UG	LB	Lab

Spring 2008	EES421	421	Intro to Structural Geology	EES	Earth & Environmental Sciences	4.5	Concepts of stress, strain and material behavior used to describe and explain how rocks deform, depositional structures.	UG	LL	Lecture/Lab Combination
Spring 2008	EES422	422	Concepts in Geophysics	EES	Earth & Environmental Sciences	5	(Also listed as PHY 422). Introduction to gravity, magnetic, seismic, and electricl methods of subsurfance investigation. Three hours lecture, four hours lab.	UG	LE	Lecture
Spring 2008	EES422L	422L	Intro Geophysics Prospect Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 422.	UG	LB	Lab
Spring 2008	EES423L	423L	Seismic Methods Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 423.	UG	LB	Lab
Spring 2008	EES424	424	Regional Tectonics	EES	Earth & Environmental Sciences	3	Study of the structure of the earth as revealed by solid earth geophysics and dynamics of internal geologic processes, and of the large scale tectonic structure of the North American continent obtained through the Decade of North American Geology Project.	UG	LE	Lecture
Spring 2008	EES425	425	Concepts in Geophysics	EES	Earth & Environmental Sciences	4	(Listed jointly with PHY 425) Special topics in geophysics. 3 hours lecture, 2 hours lab.	UG	LE	Lecture
Spring 2008	EES425L	425L	Conc in Geophysics Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 425.	UG	LB	Lab

Spring 2008	EES426	426	Geophysics Seminar	EES	Earth & Environmental Sciences	1	Literature survey and presentations by students on selected topics in geophysics.	UG	SE	Seminar
Spring 2008	EES427	427	Process Geomorphology	EES	Earth & Environmental Sciences	4	Study of the processes that create and modify landforms. Classifications of landforms and what they reveal of past geologic processes and climates.	UG	LE	Lecture
Spring 2008	EES428	428	Ear & Env Sci Colloquium	EES	Earth & Environmental Sciences	0.5	Selected geological topics discussed by students, guest speakers, and faculty. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	EES429	429	Geo/Env Remote Sensing	EES	Earth & Environmental Sciences	4	The use of aerial photographs, satellite and radar images for geological mapping, exploration of mineral resources, hydrogeology, hazard monitoring, environmental problems, and land use monitoring and analysis.	UG	LE	Lecture
Spring 2008	EES429L	429L	GL Applic Remot Sensing Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 429.	UG	LB	Lab
Spring 2008	EES430	430	Geo/Environ App of GIS	EES	Earth & Environmental Sciences	4	Study of the concepts, terminology, data models, and basic analytical functions of Geographic Information System and its applications to solving enviromental and geologic problems. ArcGIS is used for hands-on exercises and a class project.	UG	LE	Lecture

Spring 2008	EES431	431	Elec Methods in Env Geop	EES	Earth & Environmental Sciences	4	The principles and practices of acquisition and interpretation of data from electrical and electromagnetic geophysical techniques.	UG	LE	Lecture
Spring 2008	EES432	432	Carbonate Sediment/Petro	EES	Earth & Environmental Sciences	4.5	Interpretation of ancient and modern carbonate systems using sequence stratigraphic principles. Carbonate facies models as predictive tools for hydrocarbon exploration and aquifer modeling. Composition, origin, and diagenesis of carbonate rocks.	UG	LE	Lecture
Spring 2008	EES432L	432L	Carb Sedim & Petrol Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 432.	UG	LB	Lab
Spring 2008	EES433	433	Geophysical Field Research	EES	Earth & Environmental Sciences	1	Geophysical research participation in a project of the department. The content and techniques will depend on the particular project, but will normally have an extensive component of field data acquisition. May be repeated for credit. May be taken for a letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	EES434	434	Field Geology	EES	Earth & Environmental Sciences	9	Geologic phenomena illustrated in the field. Introduction of mapping techniques and application of many geological disciplines to geologic analysis.	UG	LE	Lecture

Spring 2008	EES436	436	Diagenesis of Sed Rocks	EES	Earth & Environmental Sciences	3	Theory and application of petrographic techniques to studies of carbonate and clastic rocks, with emphasis on diagenesis and porosity development.	UG	LE	Lecture
Spring 2008	EES437	437	Subsurface Imaging	EES	Earth & Environmental Sciences	4	Digital processing and visualization of seismic reflection and ground penetrating radar data. Two hours lecture, four hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	EES438	438	Seismic Interpretation	EES	Earth & Environmental Sciences	3	Interpretation methods for seismic reflection data are studied with emphasis on structural and stratigraphic interpretation for petroleum traps.	UG	LE	Lecture
Spring 2008	EES438L	438L	Seismic Interpretation Lab	EES	Earth & Environmental Sciences	0	Required laboratory for EES 438.	UG	LB	Lab
Spring 2008	EES442	442	Fossil Vertebrates and Plants	EES	Earth & Environmental Sciences	4.5	Morphology, geologic record, and geographic distribution of major vertebrate and plant groups characterized by significant fossil representation. Three hours lecture, three hours lab.	UG	LE	Lecture
Spring 2008	EES444	444	Formation Analysis	EES	Earth & Environmental Sciences	4	Theory, application, and interpretation of geophysical logs with emphasis on their use in correlation and determination of porosity, permebility, and fluid content of subsurfance formations. Three hours lecture, two hours lab.	UG	LE	Lecture

Spring 2008	EES445	445	Petroleum Geology	EES	Earth & Environmental Sciences	4	Hydrocarbon source rocks, maturation, and migration. Reservoir rocks and traps. Fluids in the reservoir; gas, oil, water, and relationships. Exploration for and production of hydrocarbons. Review of major petroleum basins and deposits.	UG	LE	Lecture
Spring 2008	EES446	446	Sequence Stratigraphy	EES	Earth & Environmental Sciences	3	Provides a firm grounding in the mechanisms that produce sea-level change, how sediments respond to these changes, and how the architecture of basins develop over time.	UG	LE	Lecture
Spring 2008	EES450	450	Hydrogeology	EES	Earth & Environmental Sciences	4	Provides a fundamental understanding of basic hydrological principles including ground water flow and chemistry, surface water hydrology, unsaturated flow, and meteorology. Students are expected to understand basic physics and calculus.	UG	LE	Lecture
Spring 2008	EES454	454	Grnd Water Flw and Trans	EES	Earth & Environmental Sciences	4	Covers the occurrence and movement of ground water, and the advection and dispersion of contaminants in groundwater flow regimes. Lab introduces interpreting the hydraulic properties of groundwater flow regimes from field data. Three hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	EES455	455	Hydrogeochemistry	EES	Earth & Environmental Sciences	4	Focuses on the chemical interactions between natural waters and their geologic environments. Included are chemical principles, carbonate system, silicate equilibria and weathing, redox reactions, isotope hydrology and hydrogeochemical modeling.	UG	LE	Lecture
Spring 2008	EES456	456	Ground Water Contaminatino	EES	Earth & Environmental Sciences	4	Behavior of organic and inorganic pollutant in the vadose zone and saturated subsurface including vapor migration, dissolution, and sorption of LNAPLs and DNAPLs; chemical and microbiological degradation; and fate of chlorinated and other hydrocarbons.	UG	LE	Lecture
Spring 2008	EES457	457	Site Remediation	EES	Earth & Environmental Sciences	3	Chemical and microbiological degradation of pollutants in subsurface. Diagnosis and assessment of contaminated sites. Concepts and techniques for LNAPL and DNAPL remediation; pump and-treat, soil vapor extraction, bioventing/airsparging, chemical treatment, solvent extraction and bioremediation.	UG	LE	Lecture

Spring 2008	EES458	458	Environmental Geochemistry	EES	Earth & Environmental Sciences	4	Introduction to environmental organic pollutants. Concepts in behavior of pollutants; vapor pressure, solubility, air-water and solvent-water partitioning, dissociation in water, and sorption to solids. Chemical and microbial degradation of organic pollutants. Modeling concepts.	UG	LE	Lecture
Spring 2008	EES460	460	Biological Safety	EES	Earth & Environmental Sciences	2	The basic principles and practices of biosafety are examined. This course teaches the identification, handling, and containment of potentially hazardous biological materials, including microorganisms and recombinant DNA.	UG	LE	Lecture
Spring 2008	EES462	462	Environmental Toxicology	EES	Earth & Environmental Sciences	3		UG	LE	Lecture
Spring 2008	EES464	464	Risk Assessment & Comm	EES	Earth & Environmental Sciences	4	Studies the determination of quantitative risk to humans and the environment. Approaches currently used in regulatory activites are described, showing method of hazard identification, sampling, data evaluation, exposure assessment, toxicity assessment, and risk characterization. Minimum of two BIO courses and completion of freshman chemistry required.	UG	LE	Lecture

Spring 2008	EES466	466	OSHA Compliance	EES	Earth & Environmental Sciences	1	Intended for persons having management responsibility for occupational safety and health; this course provides practical application of the theories of safety and health law, and suggestions for their real world application.	UG	LE	Lecture
Spring 2008	EES468	468	Environ Law for Scientists	EES	Earth & Environmental Sciences	3	Geared to environmental sciences students, the course discusses applicable common law principles before focusing on the variety of environmental statutes, implementing regulations and enforcement.	UG	LE	Lecture
Spring 2008	EES470	470	Environ Intern & Career	EES	Earth & Environmental Sciences	2	Environmental internship experiences are presented and discussed, followed by group projects to evaluate current and near future career opportunities within the environmental health science field. For Environmental Health Science Majors only.	UG	LE	Lecture
Spring 2008	EES472	472	Epidem & Community Hlth	EES	Earth & Environmental Sciences	3	Communicable and occupational diseases on contemporary importance; includes epidemiological investigation, environmental considerations, and control procedures.	UG	LE	Lecture
Spring 2008	EES474	474	Fund Occup Hlth & Safety	EES	Earth & Environmental Sciences	3	Introduction to accident recognition, evaluation, and control in the work environment. Emphasis on methods of hazard recognition and control management.	UG	LE	Lecture

Spring 2008	EES475	475	Fund Occup Hlth/Sfty Lab	EES	Earth & Environmental Sciences	1	Introduction to accident recognitiion, evaluation, and control in the work environment by hands-on equipment use. Methods of inspection, accident investigation, and evaluation of accident programs are stressed.	UG	LB	Lab
Spring 2008	EES476	476	Air Quality Management	EES	Earth & Environmental Sciences	3	Designed to provide a broad overview of the science of air quality and its management: includes atmospheric pollutants, dispersion, health and welfare effects, air-quality monitoring, source control, regulation, and indoor air pollution.	UG	LE	Lecture
Spring 2008	EES478	478	Environ Issues Seminar	EES	Earth & Environmental Sciences	2	Students will gain a better understanding of the controversies surrounding many current environmental issues, while also enhancing their library research, presentation and advocacy skills.	UG	SE	Seminar
Spring 2008	EES482	482	Environmental Field Meth	EES	Earth & Environmental Sciences	2	Field-oriented course where students learn techniques of environmental field investigation, such as drilling methods and field sampling.	UG	LE	Lecture
Spring 2008	EES482	482	Environmental Field Meth	EES	Earth & Environmental Sciences	2	Field-oriented course where students learn techniques of environmental field investigation, such as drilling methods and field sampling.	UG	IS	Independent Study

Spring 2008	EES484	484	Water Sed Quality Assess	EES	Earth & Environmental Sciences	3	This lecture and lab/field course provides an overview of major chemical/physical methods used for assessing the quality of aquatic systems, particularly freshwaters. Physicochemical processes and interactions influencing aquatic biota and food webs are reviewed.	UG	LL	Lecture/Lab Combination
Spring 2008	EES491	491	Teaching Experience	EES	Earth & Environmental Sciences	2	Course is designed to give undergraduate majors experience in teaching laboratory sections of geology courses.	UG	IS	Independent Study
Spring 2008	EES496	496	Senior Thesis Research	EES	Earth & Environmental Sciences	1	Student participate in research data collection and data analysis. Students write a senior thesis in the style of a professional journal.	UG	IS	Independent Study
Spring 2008	EES499	499	Spec Prob. Earth & Env	EES	Earth & Environmental Sciences	1	Course allow students opportunity to perform research in earth and environmental science topics.	UG	IS	Independent Study
Spring 2008	EES684	684	Water & Sedim Quality Assessmt	EES	Earth & Environmental Sciences	3	This lecture and lab/field course provides an overview of major chemical/physical methods used for assessing the quality of aquatic systems, particularly freshwaters. Physicochemical processes and interactions influencing aquatic biota and food webs are reviewed.	GR	LL	Lecture/Lab Combination

Spring 2008	EGR101	101	Intr Mth for Egr Applics	EGR	Engineering	5	Introduction to the use of differential and integral calculus with emphasis on engineering applications relevant to the fundamental courses in engineering and computer science.	UG	LE	Lecture
Spring 2008	EGR101L	101L	Intr Mth Egr Applics Lab	EGR	Engineering	0	Required laboratory for EGR 101.	UG	LB	Lab
Spring 2008	EGR101R	101R	Intr Mth Egr Applics Rec	EGR	Engineering	0	Required recitation for EGR 101.	UG	RE	Recitation
Spring 2008	EGR130	130	Intro Pract of Machining	EGR	Engineering	1		UG	LB	Lab
Spring 2008	EGR153	153	Fortran Programming	EGR	Engineering	4	Introduction to the use of digital computers with structured FORTRAN as the programming language. Algorithm development and engineering problem-solving techniques. Use of library subroutines and graphical displays.	UG	LE	Lecture
Spring 2008	EGR153L	153L	Fortran Programming Lab	EGR	Engineering	0	Required laboratory for EGR 153.	UG	LB	Lab
Spring 2008	EGR190	190	Fundamentals of EGR & CS	EGR	Engineering	4	Provides a practical exposure to important applications and hands-on laboratory experience to give students an introduction to computer science and engineering. Teamwork and problem solving are emphasized.	UG	LE	Lecture
Spring 2008	EGR190L	190L	Fund of EGR & CS Lab	EGR	Engineering	0	Required laboratory for EGR 190.	UG	LB	Lab
Spring 2008	EGR190W	190W	Writing in EGR 190	EGR	Engineering	0	Required writing component for EGR 190.	UG	LB	Lab

Spring 2008	EGR191	191	Fund of Engineering II	EGR	Engineering	3	Continuation of EGR 190. Provides an introduction to engineering practice and the opportunity to examine different engineering fields. Includes freshman design experience culminating in a team competition. May be taken for a letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	EGR191L	191L	Explor EGR & Comp Sci Lab	EGR	Engineering	0	Required laboratory for EE 191.	UG	LB	Lab
Spring 2008	EGR199	199	Special Topics in Egr	EGR	Engineering	1	Topics may vary. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	EGR199L	199L	Special Topics in Egr Lab	EGR	Engineering	0	Required laboratory for EGR 199.	UG	LB	Lab
Spring 2008	EGR335	335	Tech Comm for EGR & CS	EGR	Engineering	3	A modular approach to oral and written communication of complex technical information to an expert audience. Includes describing technical mechanisms and processes; designing and using tables, graphs, charts, and figures; producing technical proposals, progress reports, feasibility reports, and formal reports; and doing technical briefings.	UG	LE	Lecture
Spring 2008	EGR335W	335W	Writing in EGR 335	EGR	Engineering	0	Required writing component for EGR 335.	UG	LB	Lab

Spring 2008	EGR482	482	Engineering Fundamentals	EGR	Engineering	3	A review of the fundamental concepts covered in an undergraduate engineering curriculum to help students prepare for the fundamentals of engineering examination. Senior standing in an engineering program or graduation from an engineering program required. May be taken for ?a letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	EGR499	499	Special Problems in Egr	EGR	Engineering	1	Special problems in advanced engineering. Topics vary. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	EGR535	535	Tech Comm for EGR & CS	EGR	Engineering	3	A modular approach to oral and written communication of complex technical information to an expert audience. Course includes describing technical mechanisms, processes designing, and using tables, graphs, charts, and figures; producing technical proposals, progress reports, feasibility reports, and formal reports; and doing technical briefings.	GR	LE	Lecture
Spring 2008	EGR699	699	Special Problems in Egr	EGR	Engineering	1	Special problems in advanced engineering topics. Prerequisite: instructor approval. Graded pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	EGR700	700	Prin of Instruction Egr	EGR	Engineering	3		GR	LE	Lecture

Spring 2008	EGR701	701	Linear Systems	EGR	Engineering	4	(Also listed as EE 701 and BMS 705.) Signal representation, orthonormal bases, and generalized Fourier series. Description of linear, discrete, and continuous systems. Systems analysis via classical equations, convolution, and transform methods.	GR	LE	Lecture
Spring 2008	EGR702	702	Systems Engrg & Analysis	EGR	Engineering	4	Exposes students to the design of systems and tools for the analysis of complex technological systems.	GR	LE	Lecture
Spring 2008	EGR703	703	Computational Egrg Analy	EGR	Engineering	4	Course is designed to expose students to practical and efficient computational techniques that are routinely encountered in modeling, simulation, and analysis of engineering problems.	GR	LE	Lecture
Spring 2008	EGR704	704	Design Optimization	EGR	Engineering	4	Concepts of minima and maxima; linear, dynamic, integer and nonlinear programming; variational methods. Interdisciplinary engineering applications are emphasized.	GR	LE	Lecture
Spring 2008	EGR705	705	Des&Anal of Egr Experimnt	EGR	Engineering	4	Introduction to planning and analysis of engineering experiments. Topics include basic statistics review, linear models, regression, analysis of variance, experiment designs, response surface methods, and engineering applications.	GR	LE	Lecture
Spring 2008	EGR789	789	Continuing Registration	EGR	Engineering	1		GR	IS	Independent Study

Spring 2008	EGR890	890	Special Problems in Egr	EGR	Engineering	1		GR	LE	Lecture
Spring 2008	EGR891	891	PhD Seminar	EGR	Engineering	1	Ph.D. seminar course required of all students seeking the Ph.D. in Engineering. Graded pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	EGR899	899	Thesis	EGR	Engineering	1	Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	EH260W	260W	Writing in EES 260	EH	Environmental Health	0	Required writing component for EES 260.	UG	LB	Lab
Spring 2008	EH401W	401W	Writing in EH 401	EH	Environmental Health	0	Required writing component for EH 401.	UG	LB	Lab
Spring 2008	EH462	462	Epidem & Community Hlth	EH	Environmental Health	3	Communicable and occupational diseases of contemporary importance; includes epidemiological investigation, environmental considerations, and control procedures.	UG	LE	Lecture
Spring 2008	EH564	564	Solid & Haz Waste Mgt	EH	Environmental Health	3	Examines the fundamentals of solid, infectious, and hazardous waste management. Topics covered include regulatory history, regulatory processes, environmental audits, requirements for waste generators, transporters, treatment/storage/disposal facilities, and pollution prevention concepts.	GR	LE	Lecture

Spring 2008	EH568	568	Hazard Mat Hlth & Safety	EH	Environmental Health	4	Covers the operation of managing hazardous materials and emergency response in the workplace or at spills or at hazardous waste sites. Satisfies OSHA 40 hour training requirements in 40 CFR 1910.120.	GR	LE	Lecture
Spring 2008	EH569	569	Hazwoper Refresher	EH	Environmental Health	1	Refresher training covering management of hazardous materials and energy response in the workplace or at spills or hazardous waste sites. Satisfies OSHA 8 hour training requirement in 40 CFR 1910.120.	GR	LE	Lecture
Spring 2008	EH631	631	Risk Assess & Communicat	EH	Environmental Health	4	Studies the determination of quantitative risk to humans and the environment. Approaches currently used in regulatory activies are described, showing method of hazard identification, sampling, data evaluation, exposure assessment, toxicity assessment, and risk characterization.	GR	LE	Lecture
Spring 2008	EH652	652	Env Prot: Law, Regul & Enfor	EH	Environmental Health	3	Reviews the American legal system, emphasizing regulatory agencies and the courts; environmental and toxic tort case law; and the complex way that the myriad enviromental laws and regulations are structured and enforced. Titles vary	GR	LE	Lecture

Spring 2008	EH653	653	Natural Resource Managmt	EH	Environmental Health	3	Lecture/seminar course covering principles of wildlife, fisheries, and forestry management. Major topics include basic ecological principles, population dynamics and analysis, habitat assessment, and ecosystem and people management.	GR	LE	Lecture
Spring 2008	EH654	654	OSHA Compliance	EH	Environmental Health	1	Intended for persons having management responsibilities for occupational safety & health, this course provides practical application of theories of safety & health law, and suggestions for their real world application.	GR	LE	Lecture
Spring 2008	EH662	662	Epidemiology & Comm Hlth	EH	Environmental Health	3	Communicable and occupational diseases of contemporary importance, includes epidemiological investigation, environmental considerations, and control procedures.	GR	LE	Lecture
Spring 2008	EH666	666	Fund Occup Hlth & Safety	EH	Environmental Health	3	Introduction to accident recognition, evaluation, and control in the work environment, with emphasis on methods of hazard recognition and control management.	GR	LE	Lecture

Spring 2008	EH667	667	Fund Occup Hlth/Safety Lab	EH	Environmental Health	3	Introduction to accident recognition, evaluation and control in the work environment by hands-on type of equipment usage. Methods of inspection, accident investigation, and evaluation of accident programs are stressed.	GR	LB	Lab
Spring 2008	EH672	672	Air Quality Management	EH	Environmental Health	3	Designed to provide a broad overview of the science of air quality and its management: includes atmospheric pollutants, dispersion, health and welfare effects, air quality monitoring, source control, regulation and indoor air pollution.	GR	LE	Lecture
Spring 2008	EH692	692	Environ Issues Seminar	EH	Environmental Health	2	Seminar provides students with a more in-depth understanding of a number of environmental topics and enhances library research, writing, presentation, and advocacy skills, In addition, students will learn that there are at least two sides to any of the issues discussed.	GR	SE	Seminar
Spring 2008	EMD600	600	Student Initiated Elective	EMD	Emergency Medicine	2		MD	LE	Lecture
Spring 2008	EMD601	601	Critical Case	EMD	Emergency Medicine	2		MD	CL	Clinical
Spring 2008	EMD602	602	Emergency Med Preceptorship	EMD	Emergency Medicine	2		MD	LE	Lecture

Spring 2008	EMD800	800	Student-Initiated Elective	EMD	Emergency Medicine	4		MD	H	Hospital
Spring 2008	EMD801	801	Critical Care	EMD	Emergency Medicine	8		MD	CL	Clinical
Spring 2008	EMD806	806	Emergency Medicine	EMD	Emergency Medicine	8		MD	CL	Clinical
Spring 2008	EMD891	891	Emergency Medicine Clerkship	EMD	Emergency Medicine	8		MD	CL	Clinical
Spring 2008	EMD900	900	Extramural	EMD	Emergency Medicine	4		MD	H	Hospital
Spring 2008	ENG095	095	Classroom Communication	ENG	English	3	Introduction to effective communication skills for the classroom, emphasizing oral proficiency, teaching skills, and culture of the American classroom. Placement based on performance on the Wright State Oral Proficiency test for International Teaching Assistants.	UG	LE	Lecture
Spring 2008	ENG101	101	Acad Writing and Reading	ENG	English	4	Introduces students to principles of effective written communication and critical reading. Stresses invention, drafting, revising, editing, and self-assessment, along with effective critiquing and collaborating.	UG	LE	Lecture

Spring 2008	ENG102	102	Writing Acad Discourse	ENG	English	4	Adapts principles introduced in ENG 101 to typical university writing tasks. Stresses writing effectively within various contexts, reading critically, and using source materials effectively in argumentative and research writing.	UG	LE	Lecture
Spring 2008	ENG110	110	ESL: Speaking	ENG	English	4	Basic course in spoken English, both production and comprehension. May be repeated. Open only to non-native speakers of English.	UG	LE	Lecture
Spring 2008	ENG111	111	ESL: Basic Writing	ENG	English	4	Basic course in written communication, with an emphasis on sentence structure. Open to non-native speakers of English only.	UG	LE	Lecture
Spring 2008	ENG112	112	ESL: Advanced Writing	ENG	English	4	Course in written communication with an emphasis on grammatical structures, organizational skills, and topic development. For non-native speakers of English only.	UG	LE	Lecture
Spring 2008	ENG190	190	Issues and Ideas in Lit	ENG	English	3	Readings in literature dealing with a single theme or a specific problem; for example, crisis and confrontation in American literature, the images of the hero in literature, the supernatural and occult in literature, and sex and censorship in literature.	UG	LE	Lecture

Spring 2008	ENG199	199	Topics in English	ENG	English	1	Problems, approaches, and topics in the fields of English. Topics vary. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	ENG201	201	Contemporary Literature	ENG	English	3	Readings in American and British fiction, poetry, and drama of the present and the recent past; for example, American novel since 1945, literature of the absurd, protest literature, and contemporary poetry.	UG	LE	Lecture
Spring 2008	ENG202	202	The Literary Tradition	ENG	English	3	Readings in British and American literature; for example, Shakespeare, American masterpieces, British novel, and readings in biography.	UG	LE	Lecture
Spring 2008	ENG203	203	World Literature	ENG	English	3	Readings in world literature; for example, the literature of Africa, the international best seller, and the hero in world myth.	UG	LE	Lecture
Spring 2008	ENG204	204	Great Books: Literature	ENG	English	4	Introduction to interpreting literature, using works from various periods and cultures, viewed in their social and historical contexts and read for their enduring interest.	UG	LE	Lecture
Spring 2008	ENG204W	204W	Writing in ENG 204	ENG	English	0	Required writing component for ENG 204.	UG	LB	Lab

Spring 2008	ENG205	205	Afro-American Literature	ENG	English	4	Readings in African American literature: for example, Phyllis Wheatley to the present, nineteenth-century freedom literature, twentieth-century black novel, and the female African-American tradition. Titles vary.	UG	LE	Lecture
Spring 2008	ENG210	210	Intro to Poetry	ENG	English	3	Poetry as a type of literature together with an introduction to various approaches to the enjoyment of poetry.	UG	LE	Lecture
Spring 2008	ENG211	211	Intro to Fiction	ENG	English	3	Introduction to the reading of prose fiction including a study of the elements of fiction, various forms and modes of fiction, and the enjoyment of fiction.	UG	LE	Lecture
Spring 2008	ENG212	212	Introduction to Drama	ENG	English	3	Introduction to the study and analysis of drama including differences among plays of different periods.	UG	LE	Lecture
Spring 2008	ENG240	240	Intermediate Composition	ENG	English	3	Improvement of writing skills with special attention to individual writing weaknesses. Includes a review of basic writing principles.	UG	LE	Lecture
Spring 2008	ENG257	257	Basic Media Writing	ENG	English	4	(Also listed as COM 256.) Introduction to writing for the media. Structure and organization of media copy. Course requires reporting in the field.	UG	LE	Lecture
Spring 2008	ENG257W	257W	Writing in ENG 257	ENG	English	0	Required writing component for ENG 257.	UG	LB	Lab
Spring 2008	ENG291	291	Intro to Creative Writing	ENG	English	3		UG	LE	Lecture

Spring 2008	ENG300	300	Literary Study I	ENG	English	4	Introduction to the discipline of English, with a focus on the study of poetry and the writing of critical papers on literary topics.	UG	LE	Lecture
Spring 2008	ENG300W	300W	Writing in ENG 300	ENG	English	0	Required writing component for ENG 300.	UG	LB	Lab
Spring 2008	ENG301	301	Literary Study II	ENG	English	4	Introduction to the discipline of English, with a focus on the study of narrative and the techniques of literary analysis and research.	UG	LE	Lecture
Spring 2008	ENG301W	301W	Writing in ENG 301	ENG	English	0	Required writing comonent for ENG 301.	UG	LB	Lab
Spring 2008	ENG302	302	Poetry Writing	ENG	English	4		UG	LE	Lecture
Spring 2008	ENG303	303	Bgn Short Story Writing	ENG	English	4	Introduction to elements and techniques of the craft of writing short stories, including reading, analysis, and group discussion of published and student-written stories. May be repeated once for a total of 8 hours.	UG	LE	Lecture
Spring 2008	ENG304	304	Dramatic Writing	ENG	English	4	(Also listed as TH 304.) Theory and practice of techniques of dramatic writing emphasizing writing of original plays.	UG	LE	Lecture
Spring 2008	ENG310	310	Studies in African Lit	ENG	English	4		UG	LE	Lecture
Spring 2008	ENG330	330	Business Writing	ENG	English	4	Written business and organizational communication; attention to various forms including short reports and informal oral presentations.	UG	LE	Lecture

Spring 2008	ENG333	333	Fund of Technical Writing	ENG	English	4	Survey of the fundamental principles and skills used in scientific and technical writing.	UG	LE	Lecture
Spring 2008	ENG340	340	English for Teachers	ENG	English	4	Systematic methods of examining the sound system and sentence structure of English, with applications of language acquisition and variation related to the elementary classroom.	UG	LE	Lecture
Spring 2008	ENG341	341	Adv Comp for Teachers	ENG	English	4	Combines study and pedagogy of composition for education majors specializing in grades 4-12. Emphasis is placed on writing as a process and on improving writing skills.	UG	LE	Lecture
Spring 2008	ENG343	343	Advanced Composition	ENG	English	4	Emphasis on sophisticated techniques of expository writing and the refinement of style.	UG	LE	Lecture
Spring 2008	ENG344	344	Research Writing	ENG	English	4	Instruction in organizing, documenting, and writing of research papers. Research projects based not only on primary and secondary sources but also on experiment and investigation.	UG	LE	Lecture
Spring 2008	ENG344W	344W	Writing in ENG 344	ENG	English	0		UG	LB	Lab
Spring 2008	ENG345	345	Writing Workshop	ENG	English	4	Introduction to the teaching of writing in middle and high school language arts and English classes. Students will participate in writing workshop activities and study underlying principles of workshop instruction.	UG	LE	Lecture

Spring 2008	ENG346	346	Reading Workshop	ENG	English	4	Introduction to direct reading instruction and workshop methodology through the modeling of teaching strategies. Topics include classroom organization and planning, journals, questioning strategies, skills and literary minilessons, and response projects.	UG	LE	Lecture
Spring 2008	ENG347	347	Desktop Pub for ILA	ENG	English	4	Introduction to computer applications for a variety of both print and online publications, including page design and layout, writing and editing.	UG	LE	Lecture
Spring 2008	ENG350	350	British/Amer Lit Hist	ENG	English	4	Representative works from major periods of British and American Literature, read with attention to their historical background and cultural contexts.	UG	LE	Lecture
Spring 2008	ENG351	351	Brit Txt:Mediev-17th C	ENG	English	4	Representative works of major English writers of the medieval period and the 16th century.	UG	LE	Lecture
Spring 2008	ENG352	352	Brit Txt: 17th-18th Cent	ENG	English	4	Representative works of major British writers of the 17th and 18th centuries.	UG	LE	Lecture
Spring 2008	ENG353	353	Brit Texts: 19th Cent	ENG	English	4	Representative works of major romantic and victorian writers.	UG	LE	Lecture
Spring 2008	ENG354	354	Brit Texts: 20th Century	ENG	English	4	Representative works of major English writers of the modern period.	UG	LE	Lecture
Spring 2008	ENG355	355	Amer Txt:Earlier 19th C	ENG	English	4	Representative works of major American writers before the Civil War.	UG	LE	Lecture

Spring 2008	ENG356	356	Amer Txt: Later 19th C	ENG	English	4	Representative works of major American writers from the Civil War to World War I.	UG	LE	Lecture
Spring 2008	ENG357	357	Amer Txts: 20th Cent	ENG	English	4	Representative works of major American writers since the twenties.	UG	LE	Lecture
Spring 2008	ENG359	359	Post-Colonial Texts	ENG	English	4	Representative works of major anglophone writers from around the world.	UG	LE	Lecture
Spring 2008	ENG364	364	Communicatio n Graphics	ENG	English	4	(Also listed as COM 364.) Introduces basic principles of graphics communication, primarily as applied to print media. Includes the history and basic concepts of graphics communication, typography, photo editing, and graphic design.	UG	LE	Lecture
Spring 2008	ENG366	366	Advanced News Writing	ENG	English	4	(Also listed as COM 366.) Advanced study of writing skills, practices, and procedures used in reporting news for mass media. Actual reporting in the field is required. News writing skills introduced in COM 256 are further refined.	UG	LE	Lecture
Spring 2008	ENG385	385	Adolescent Literature	ENG	English	4	Introduction to various types of literature written for young adults. Reading and analysis of adolescent books with an emphasis on their selection and use in the secondary language arts classroom.	UG	LE	Lecture

Spring 2008	ENG386	386	Tching Shakespeare Perf	ENG	English	4	Read and discuss plays by Shakespeare in the context of his times and with attention to teaching Shakespeare in high school. Topics include Shakespeare's texts and their performance in film and theatre.	UG	LE	Lecture
Spring 2008	ENG386W	386W	Writing in ENG 386	ENG	English	0		UG	LB	Lab
Spring 2008	ENG392	392	Poetry Writing Workshop	ENG	English	4	Intermediate practice in writing and revising poems, refining craft and style, with the aim of producing poetry of superior merit; group discussion of manuscripts; and reading and discussion of modern poetry and poetics. May be repeated twice for credit.	UG	LE	Lecture
Spring 2008	ENG393	393	Fiction Writing Workshop	ENG	English	4	Intermediate study and practice of the art and craft of writing fiction, focusing on the elements of fiction and on improving students' narrative skills. May be repeated once for credit.	UG	LE	Lecture
Spring 2008	ENG399	399	Studies in Selected Subj	ENG	English	1	Problems, approaches, and topics in the field of English. Topics vary.	UG	LE	Lecture
Spring 2008	ENG400	400	Top in Comp & Prof Writing	ENG	English	4	Courses, seminars, or workshops in specialized topics relating to writing with computers.	UG	LE	Lecture
Spring 2008	ENG400W	400W	Writing in ENG 400	ENG	English	0	Required writing component for ENG 400.	UG	LB	Lab

Spring 2008	ENG402	402	Professional Editing	ENG	English	4	Instruction and experience in editing technical and professional documents, including both print and online publications. Covers types of editing, the production process and issues in editing.	UG	LE	Lecture
Spring 2008	ENG404	404	Short Topic Prof Writing	ENG	English	1	Short courses, seminars, or workshops in specialized topics relating to business, technical, and professional writing.	UG	LE	Lecture
Spring 2008	ENG405	405	Top Tech and Prof Writing	ENG	English	1	Courses, seminars, or workshops in specialized topics relating to business, technical, and professional writing.	UG	LE	Lecture
Spring 2008	ENG405W	405W	Writing in ENG 405	ENG	English	0	Required writing component for ENG 405.	UG	LB	Lab
Spring 2008	ENG410	410	Studies in British Lit	ENG	English	4	Intensive study of British literary history and/or the work of individual British writers. Intended to develop an understanding of literature within the contexts of the author's life, literary production, and historical background.	UG	LE	Lecture
Spring 2008	ENG410W	410W	Writing in ENG 410	ENG	English	0	Required writing component for ENG 410.	UG	LB	Lab
Spring 2008	ENG420	420	Studies in American Lit	ENG	English	4		UG	LE	Lecture
Spring 2008	ENG420W	420W	Writing in ENG 420	ENG	English	0	Required writing component for ENG 420.	UG	LB	Lab

Spring 2008	ENG430	430	Lit, Gender & Sexuality	ENG	English	4	Intensive study of literature from the perspectives of gender theory. Intended to develop an under-standing of gender and sexuality as important both to literature and to its critical appreciation.	UG	LE	Lecture
Spring 2008	ENG430W	430W	Writing in ENG 430	ENG	English	0		UG	LB	Lab
Spring 2008	ENG440	440	Ethnic & Regional Lit	ENG	English	4	Intensive study of literature from different regions of America or reflecting the experiences of different ethnic groups. Intended to develop an understanding of race, region, and ethnicity as important both to literature and to its critical appreciation.	UG	LE	Lecture
Spring 2008	ENG440W	440W	Writing in ENG 440	ENG	English	0		UG	LB	Lab
Spring 2008	ENG450	450	Study in Literary Theory	ENG	English	4	Intensive study of literary theory in order to develop an understanding of critical questions and approaches.	UG	LE	Lecture
Spring 2008	ENG454	454	Feature Story Writing	ENG	English	4	(Also listed as COM 454.) Finding, writing, polishing, and marketing feature material.	UG	LE	Lecture
Spring 2008	ENG454W	454W	Writing in English 454	ENG	English	0		UG	LB	Lab
Spring 2008	ENG458	458	Editing for the Media	ENG	English	4	(Also listed as COM 458.) Editing of copy for mass media with emphasis on newspaper format, headline writing, rewriting, and general copy desk.	UG	LE	Lecture
Spring 2008	ENG458W	458W	Writing in Englist 458	ENG	English	0		UG	LB	Lab

Spring 2008	ENG460	460	Literary Genres & Themes	ENG	English	4	Intensive study of literary genres (e.g., poetry, the novel, satire) or of literary themes. Intended to develop an understanding of formal and structural aspects of literature.	UG	LE	Lecture
Spring 2008	ENG460W	460W	Writing in ENG 460	ENG	English	0	Required writing component for ENG 460.	UG	LB	Lab
Spring 2008	ENG470	470	Studies in World Lit	ENG	English	4	Intensive study of non-European literature, focused nationally, regionally, cross-culturally, thematically, and generically.	UG	LE	Lecture
Spring 2008	ENG470W	470W	Writing in ENG 470	ENG	English	0	Required writing component for ENG 470.	UG	LB	Lab
Spring 2008	ENG474	474	TEFL Practices/Materials	ENG	English	4	Identifies the diverse needs of students learning English as a foreign language and the most effective curriculum development, resources, and teaching tecnhiques to address these needs.	UG	LE	Lecture
Spring 2008	ENG475	475	TEFL Theory & Culture	ENG	English	4	Builds awareness of cultural similarities and differences and addresses the impact of cultural and personal variables on English language learning. Provides techniques for integrating culture into the EFL classroom.	UG	LE	Lecture

Spring 2008	ENG476	476	Rhetoric Culture	ENG	English	4	Rhetorical approaches to analyzing language and persuasion. Topics include the role of metaphor, language and though; how language operates as discourse within texts, groups and situations; first-hand research of culture and persuasion.	UG	LE	Lecture
Spring 2008	ENG477	477	Workshop	ENG	English	1	Intensive study of selected special topics or problems to meet the particular needs of participating students. Titles vary.	UG	LE	Lecture
Spring 2008	ENG478	478	Intro to Linguistics	ENG	English	4	Presents a survey of the scientific study of language and focuses on describing and explaining languages in their natural environment. Includes phonetics, phonology, morphology, syntax, semantics, pragmatics, and sociolinguistics.	UG	LE	Lecture
Spring 2008	ENG479	479	History of English Lang	ENG	English	4	Study of the ancestry and early growth of the English language, the history of English sounds and inflections, the development of the English vocabulary, and variations in pronunciation and usage in modern British and American English.	UG	LE	Lecture

Spring 2008	ENG480	480	Language & Literacy	ENG	English	4	Intensive study of linguistic and/or rhetorical approaches to language. Intended to develop an understanding of language history, structure, theory, pedagogy, and context.	UG	LE	Lecture
Spring 2008	ENG480W	480W	Writing in ENG 480	ENG	English	0		UG	LB	Lab
Spring 2008	ENG481	481	Theory of ESL	ENG	English	4	Presents a theoretical foundation for the study of second language acquisition, including first language acquisition, interlanguage, contrastive analysis, error analysis, language universals, communicative competence, and learning theory.	UG	LE	Lecture
Spring 2008	ENG482	482	TESOL Grammar	ENG	English	4	Develops linguistic analysis skills to help students recognize, analyze, and remediate written and spoken grammatical errors in ESL/EFL instructional contexts. Also focuses on pedagogical aspects of grammar instruction to nonnative speakers of English.	UG	LE	Lecture
Spring 2008	ENG483	483	Sociolinguistics	ENG	English	4	Examines the sociology of language, the ethnography of speaking, the variation in language structures, the social varieties of English, with their political and educational implications, and the relationship of these to second language acquisition.	UG	LE	Lecture

Spring 2008	ENG484	484	TESOL Pract. & Materials	ENG	English	4	Develops skills in designing curricula through creating and adapting appropriate materials and activities, as well as evaluating and effectively using existing methodologies and materials available to the teacher of ESL/EFL.	UG	LE	Lecture
Spring 2008	ENG484W	484W	Writing in ENG 484	ENG	English	0		UG	LB	Lab
Spring 2008	ENG485	485	Studies in Eng Education	ENG	English	2	(Also listed as ED 420.) Focus on theoretical issues and practical problems of teaching English at all levels, including the teaching of writing and teaching of English to speakers of other languages (TESOL).	UG	LE	Lecture
Spring 2008	ENG486	486	Integrated Language Arts	ENG	English	4	Study of the integration and pedagogy of reading, writing, listening, speaking, viewing, and visually representing. Emphasis on responding to literature and introduction to interdisciplinary and thematic units.	UG	LE	Lecture
Spring 2008	ENG486W	486W	Writing in ENG 486	ENG	English	0		UG	LB	Lab
Spring 2008	ENG487	487	TESOL Assessment	ENG	English	4	Investigates key concepts and underlying theories in the field of language assessment. Looks at purposes and types of assessment with a focus on the development and use of authentic assessment for English language learners.	UG	LE	Lecture

Spring 2008	ENG488	488	TESOL in Pre-K-12 Class	ENG	English	4	Foceses on ESL education in the U.S. and Ohio. Examines historical and legal precedents. Emphasizes components necessary for successful programs, including curricula, assessment, classroom dynamics, and parental involvement.	UG	LE	Lecture
Spring 2008	ENG490	490	Sr Seminar in Literature	ENG	English	4	Intensive study and discussion of a significant writer or work. Students will conduct a quarter-long research project culminating in a seminar paper; students will also prepare a portfolio of their undergraduate work. Titles vary.	UG	LE	Lecture
Spring 2008	ENG491	491	Directed Reading	ENG	English	1	Supervised reading in special areas of American, English, or world literature in translation, and English language and linguistics not available through course structure. Limited to senior English majors with a 3.0 cumulative average.	UG	IS	Independent Study
Spring 2008	ENG492	492	Poetry Writing Seminar	ENG	English	4	Advanced students work closely with instructor on writing and revision, leading to the creation of professional and publishable poetry. Reading and discussion of contemporary poetry and poetics. May be repeated twice for credit.	UG	SE	Seminar
Spring 2008	ENG492W	492W	Writing in ENG 492	ENG	English	0	Required writing component for ENG 492.	UG	LB	Lab

Spring 2008	ENG493	493	Fiction Writing Sem	ENG	English	4	Advanced study and practice of the techniques and forms of fiction, with emphasis on producing fiction of professional and publishable quality. Includes instruction on publication strategies. May be repeated once for credit.	UG	SE	Seminar
Spring 2008	ENG493W	493W	Writing in ENG 493	ENG	English	0		UG	LB	Lab
Spring 2008	ENG494	494	Studies Creative Writing	ENG	English	4	Specialized courses in genres, modes, styles, practices, creative processes, and the craft of fiction, creative non-fiction, poetry, or playwriting.	UG	LE	Lecture
Spring 2008	ENG495	495	Internship	ENG	English	4	Practical work experience performing writing-related tasks in cooperation with local business, professional, and service organizations. Performance is supervised and evaluated by the director of writing programs. Graded pass/unsatisfactory.	UG	IN	Internship
Spring 2008	ENG498	498	English Honors Tutorial	ENG	English	2	Two-quarter sequence for senior English majors who are doing an English honors project.	UG	IS	Independent Study
Spring 2008	ENG499	499	English Honors Tutorial	ENG	English	2	Two-quarter sequence for senior English majors who are doing an English honors project.	UG	IS	Independent Study
Spring 2008	ENG530	530	Business Writing	ENG	English	4	Written business and organizational communication; attention to various forms including short reports and informal oral presentations.	GR	LE	Lecture

Spring 2008	ENG533	533	Fund of Technical Writing	ENG	English	4	Survey of the fundamental principles and skills used in scientific and technical writing.	GR	LE	Lecture
Spring 2008	ENG541	541	Adv Comp for Teachers	ENG	English	4	Combines study and pedagogy of composition for education majors specializing in grades 4-12. Emphasis is placed on writing as a process and on improving writing skills.	GR	LE	Lecture
Spring 2008	ENG543	543	Advanced Composition	ENG	English	4	Emphasis on sophisticated techniques of expository writing and the refinement of style.	GR	LE	Lecture
Spring 2008	ENG544	544	Research Writing	ENG	English	4	Instruction in organization, documentation, and writing of research papers. Research projects based not only on primary and secondary sources but also on experiment and investigation.	GR	LE	Lecture
Spring 2008	ENG545	545	Writing Workshop	ENG	English	4	Introduction to teaching writing in middle and high school language arts and English classes. Students will participate in writing workshop activities and study underlying principles of workshop instruction.	GR	LE	Lecture
Spring 2008	ENG546	546	Reading Workshop	ENG	English	4	Introduction to direct reading instruction and workshop methodology through the modeling of teaching strategies. Topics include classroom organization and planning, journals, questioning strategies, skills and literacy mini lessons, and projects.	GR	LE	Lecture

Spring 2008	ENG547	547	Desktop Pub for ILA	ENG	English	4	Introduction to computer applications for a variety of both print and online publications, including page design and layout, writing and editing.	GR	LE	Lecture
Spring 2008	ENG585	585	Adolescent Literature	ENG	English	4	Introduction to various types of literature written for young adults. Reading and analysis of adolescent books with an emphasis on their selection and use in the secondary language arts classroom.	GR	LE	Lecture
Spring 2008	ENG599	599	Studies in Selected Subjects	ENG	English	1	Course of variable content dealing with problems, approaches and topics in the field of English.	GR	LE	Lecture
Spring 2008	ENG600	600	Top in comp & Prof Writ	ENG	English	4	Courses, seminars, or workshops in specialized topics relating to writing with computers.	GR	LE	Lecture
Spring 2008	ENG602	602	Professional Editing	ENG	English	4	Instruction and experience in editing technical and professional documents, including both print and online publicatons. Covers types of editing, the production process and issues in editing.	GR	LE	Lecture
Spring 2008	ENG604	604	Short Topic Prof Writing	ENG	English	1	Short courses, seminars, or workshops in specialized topics relating to business, technical and professional writing.	GR	LE	Lecture
Spring 2008	ENG605	605	Top Tech and Prof Writ	ENG	English	1	Courses, seminars, or workshops in specialized topics relating to business, technical, and professional writing.	GR	LE	Lecture

Spring 2008	ENG610	610	Studies in British Lit	ENG	English	4	Intensive study of British literary history and/or the work of individual British writers. Intended to develop an understanding of literature within the contexts of the author's life literary production, or historical background.	GR	LE	Lecture
Spring 2008	ENG620	620	Studies in American Lit	ENG	English	4	Intensive study of American literary history and/or the work of individual American writers. Intended to develop an understanding of literature within the contexts of the authors's life, literary production, or historical background.	GR	LE	Lecture
Spring 2008	ENG630	630	Lit, Gender & Sexuality	ENG	English	4	Intensive study of literature from the perspectives of gender theory. Intended to develop an understanding of gender and sexuality as important both to literature and to its critical appreciation.	GR	LE	Lecture
Spring 2008	ENG640	640	Ethnic & Regional Lit	ENG	English	4	Intensive study of literature from different regions of America or reflecting the experiences of different ethnic groups. Intended to develop an understanding of race, region, and ethnicity as important both to literature and to its critical appreciation.	GR	LE	Lecture
Spring 2008	ENG650	650	Studies in Lit Theory	ENG	English	4	Intensive study of literary theory in order to develop an understanding of critical questions and approaches.	GR	LE	Lecture

Spring 2008	ENG654	654	Feature Story Writing	ENG	English	4	(Also listed as COM 654.) Includes finding, writing, polishing, and marketing feature material.	GR	LE	Lecture
Spring 2008	ENG658	658	Editing for the Media	ENG	English	4	(Also listed as COM 658.) Editing copy for mass media with emphasis on newspaper format, headline writing, rewriting, and general copy desk.	GR	LE	Lecture
Spring 2008	ENG660	660	Literary Genres & Themes	ENG	English	4	Intensive study of literary genres (e.g. poetry, the novel, satire) or of literary themes. Intended to develop an understanding of formal and structural aspects of literature.	GR	LE	Lecture
Spring 2008	ENG670	670	Studies in World Lit	ENG	English	4	Intensive study, in English, of non-European literature, focused nationally, regionally, cross-culturally, thematically, or generically.	GR	LE	Lecture
Spring 2008	ENG674	674	TEFL Practices/Materials	ENG	English	4	Identifies the diverse needs of students learning English as a foreign language and the most effective curriculum development, resources, and teaching techniques to address these needs.	GR	LE	Lecture
Spring 2008	ENG675	675	TEFL Theory & Culture	ENG	English	4	Builds awareness of cultural similarities and differences and addresses the impact of culture and personal variables on English language learning. Provides techniques for integrating culture into the EFL classroom.	GR	LE	Lecture

Spring 2008	ENG677	677	Workshop	ENG	English	1	Intensive study of selected special topics or problems designed to meet the needs of participating students. Titles vary.	GR	LE	Lecture
Spring 2008	ENG678	678	Intro to Linguistics	ENG	English	4	Presents a survey of the scientific study of language and focuses on describing and explaining languages in their natural environment. Includes phonetics, phonology, morphology, syntax, semantics, pragmatics, and sociolinguistics.	GR	LE	Lecture
Spring 2008	ENG679	679	History of English Lang	ENG	English	4	Study of the ancestry and early growth of English, the history of English sounds and inflections, the development of the English vocabulary, and variations in pronunciation and usage in Modern British and American English.	GR	LE	Lecture
Spring 2008	ENG680	680	Language & Literacy	ENG	English	4	Intensive study of linguistic and/or rhetorical approaches to language. Intended to develop an understanding of language history, structure, theory, pedagogy, and context.	GR	LE	Lecture
Spring 2008	ENG681	681	Theory of ESL	ENG	English	4	Presents a theoretical foundation for the study of second language acquisition, including first language acquisition, interlanguage, contrastive analysis, error analysis, language universals, communicative competence, and learning theory.	GR	LE	Lecture

Spring 2008	ENG682	682	TESOL Grammar	ENG	English	4	Develops linguistic analysis skills to help students recognize, analyze, and remediate written and spoken grammatical errors in ESL/EFL instructional contexts. Also focuses on pedagogical aspects of grammar instruction to nonnative speakers of English.	GR	LE	Lecture
Spring 2008	ENG683	683	Sociolinguistic s	ENG	English	4	Examines the sociology of language, the ethnography of speaking, the variation in language structures, the social varieties of English, with their political and educational implications, and the relationship of these to second language acquisition.	GR	LE	Lecture
Spring 2008	ENG684	684	TESOL Practices and Materials	ENG	English	4	Develops skills in designing curricula through creating and adapting appropriate materials and activities, as well as evaluating and effectively using existing practices and materials available to the teacher of ESL/EFL.	GR	LE	Lecture
Spring 2008	ENG685	685	Studies in Eng Education	ENG	English	2	(Also listed as ED 620.) Focuses on theoretical issues and practical problems of teaching English at all levels, including the teaching of writing and teaching of English to speakers of other languages (TESOL). Titles vary.	GR	LE	Lecture

Spring 2008	ENG686	686	Integrated Language Arts	ENG	English	4	Study of the integration and pedagogy of reading, writing, listening, speaking, viewing and visually representing. Emphasis on responding to literatures and introduction to interdisciplinary and thematic units.	GR	LE	Lecture
Spring 2008	ENG687	687	TESOL Assessment	ENG	English	4	Investigates key concepts and underlying theories in the field of language assessment. Looks at purposes and types of assessment with a focus on the development and use of authentic assessment for English Language learners.	GR	LE	Lecture
Spring 2008	ENG688	688	TESOL in Pre-K-12 Class	ENG	English	4	Focuses on ESL education in the U.S. and Ohio. Examines historical and legal precedents. Emphasizes components necessary for successful programs, including curricula, assessment, classroom dynamics, and parental involvement.	GR	LE	Lecture
Spring 2008	ENG692	692	Poetry Writing Seminar	ENG	English	4	Advanced students work closely with instructor on writing and revising, leading to the creation of professional and publishable poetry. Reading and discussion of contemporary poetry and poetics. May be repeated twice for credit.	GR	SE	Seminar

Spring 2008	ENG693	693	Fiction Writing Sem	ENG	English	4	Advanced study and practice of the techniques and forms of fiction, with emphasis on producing fiction of professional and publishable quality. Includes instruction on publication strategies. May be repeated once for credit.	GR	SE	Seminar
Spring 2008	ENG694	694	Studies Creative Writing	ENG	English	4	Specialized courses in genres, modes, styles, practices, creative processes, and the craft of fiction, creative non-fiction, poetry or playwriting.	GR	LE	Lecture
Spring 2008	ENG700	700	Research in Lang & Writ	ENG	English	4	Introduction to research in language and writing. Emphasis on finding and using library resources, surveying research designs, and understanding and reporting research in the human sciences.	GR	LE	Lecture
Spring 2008	ENG701	701	Research in Lit Studies	ENG	English	4	Examination of the aims and approaches of scholarly study of literature and the tools and methods of literary research. Emphasis on the problems of collecting, evaluating, and reporting the findings of scholarly study.	GR	LE	Lecture
Spring 2008	ENG702	702	Lit Crit:Theory/Practice	ENG	English	4	Examines literary criticism and theories of textuality that are being applied to literature. Emphasis is placed on understanding the development and application of contemporary theories of literature and their effect on the study of literature.	GR	LE	Lecture

Spring 2008	ENG703	703	Teaching College Comp I	ENG	English	4	Introduction to the theory and pedagogy of college-level writing courses. Requires concurrent teaching or tutorial experience. Required of all first-year English teaching assistants.	GR	LE	Lecture
Spring 2008	ENG704	704	Teaching College Comp II	ENG	English	2	Introduction to the theory and pedagogy of college-level writing courses. Requires concurrent teaching or tutorial experience. Required of all first-year English teaching assistants.	GR	LE	Lecture
Spring 2008	ENG707	707	The Nature of Language	ENG	English	4	Consideration of the sources and processes of language and its relationship to thought, imagination, and symbolic form. Emphasis on the contributions of anthropology, linguistics, philosophy, psychology, and sociology to our understanding of language.	GR	LE	Lecture
Spring 2008	ENG710	710	The Creative Process	ENG	English	4	Survey of the theoretical and practical aspects of literary creativity including such considerations as the creative imagination and writers' practice of their craft. Includes practice in the creation of original work.	GR	LE	Lecture

Spring 2008	ENG711	711	Rhetoric	ENG	English	4	Introduction to rhetoric as related to the written word. Covers the history of rhetoric, current rhetorical theory, and the application of rhetorical theory to the study of literature and composition.	GR	LE	Lecture
Spring 2008	ENG712	712	Style in Writing	ENG	English	4	Introduction to the theoretical and practical study of style in writing, with emphasis on the development of English prose style and practice in stylistic analysis.	GR	LE	Lecture
Spring 2008	ENG714	714	Discourse Analysis	ENG	English	4	Introduction to the study of language beyond the sentence level. Topics covered will include pragmatics, conversational analysis, cohesion, and written language.	GR	LE	Lecture
Spring 2008	ENG716	716	The Study of Literature	ENG	English	4	Current approaches to the study of literature in the classroom. Topics include literary types, analysis, evaluation, and the relationship of literature to other disciplines.	GR	LE	Lecture
Spring 2008	ENG717	717	The Study of Writing	ENG	English	4	Current approaches to writing and the study of composition in the classroom. Topics include whole language, invention, revision, stylistics, editing, the analysis of student writing, and effective pedagogical practice. Titles vary.	GR	LE	Lecture

Spring 2008	ENG718	718	Professional Writing	ENG	English	4	Current approaches to the study of technical, business, and other specialized writing. Critical and historical analyses are supplemented by assignments in writing the studied forms.	GR	LE	Lecture
Spring 2008	ENG720	720	Sem in Lit and Gender	ENG	English	4	Reading, research, reports, and discussion of topics dealing with gender and literature (e.g., literature by and about women, feminist critical theory and practice, and gender roles in literature). Titles vary.	GR	SE	Seminar
Spring 2008	ENG721	721	Teaching Lit and Gender	ENG	English	4	Study of materials, topics, texts, and methodology appropriate to teaching gender studies in literature. Includes an assigned lesson and a research project.	GR	LE	Lecture
Spring 2008	ENG730	730	Seminar: Major Writers	ENG	English	4	Reading, research, reports, and discussion on topics dealing with a single writer or two closely related ones (e.g., Chaucer, Melville, Joyce, or Wordsworth and Coleridge).	GR	SE	Seminar
Spring 2008	ENG731	731	Teaching Major Writers	ENG	English	4	Study of materials, topics, texts, and methodology appropriate to teaching a single writer or two closely related ones. Includes an assigned lesson and a research project.	GR	LE	Lecture

Spring 2008	ENG740	740	Seminar: Literary Genres	ENG	English	4	Reading, research, reports, and discussion on topics dealing with a single literary genre (e.g., epic, novel, tragedy, lyric poetry, or historical drama).	GR	SE	Seminar
Spring 2008	ENG741	741	Teaching Literary Genres	ENG	English	4	Study of materials, topics, texts, and methodology appropriate to teaching a single literary genre. Includes an assigned lesson and a research project.	GR	LE	Lecture
Spring 2008	ENG750	750	Seminar: Cultural Periods	ENG	English	4	Reading, research, reports, and discussion of topics dealing with the literature and culture of particular historical periods or with literary movements (e.g., the Middle Ages, the age of Johnson, romanticism, or the twenties).	GR	SE	Seminar
Spring 2008	ENG751	751	Teaching Cultural Period	ENG	English	4	Study of materials, topics, texts, and methodology appropriate to teaching the literature and culture of particular historical periods or teaching literary movements. Includes an assigned lesson and a research project.	GR	LE	Lecture
Spring 2008	ENG760	760	Sem: Spec Literary Probl	ENG	English	4	Reading, research, reports, and discussion on topics dealing with special problems such as literary themes, literary conventions, literature in relation to other disciplines, literary backgrounds, critical approaches, and interdisciplinary study.	GR	SE	Seminar

Spring 2008	ENG761	761	Teaching Spec Lit Probs	ENG	English	4	Study of materials, topics, texts, and methodology appropriate to teaching special problems such as literary themes, literary conventions, literature in relation to other disciplines. Includes an assigned lesson and a research project.	GR	LE	Lecture
Spring 2008	ENG770	770	Sem in English Language	ENG	English	4	Reading, research, reports, projects, and discussion on English linguistic topics, including phonetics, phonology, morphology, syntax, semantics, pragmatics, discourse analysis, text linguistics, sociolinguistics, psycholinguistics, language acquisition, and historical linguistics.	GR	SE	Seminar
Spring 2008	ENG780	780	Seminar in Writing	ENG	English	4	Reading, research, reports, and discussion on topics dealing with the theory and pedagogy of writing (e.g., response to writing, writing across the curriculum, computers and composition).	GR	SE	Seminar
Spring 2008	ENG789	789	Continuing Registration	ENG	English	1		GR	IS	Independent Study
Spring 2008	ENG791	791	Independent Study	ENG	English	1	Faculty-directed independent study in literature or language usually requiring reports and conferences with the instructor. A maximum of four credits may be applied to the M.A. degree.	GR	IS	Independent Study

Spring 2008	ENG793	793	Classroom Research Eng	ENG	English	1	Study, discussion, and application of techniques of observational research in the English/language arts classroom. Students will design, carry out, and write a research project. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	ENG795	795	Intern & Apprenticeship	ENG	English	4	Supervised college-level teaching, archival work, or professional writing. Graded pass/unsatisfactory.	GR	IN	Internship
Spring 2008	ENG799	799	Thesis	ENG	English	4	To be arranged with the Director of Graduate Studies. Students will be allowed a maximum of eight hours thesis credit toward the degree.	GR	IS	Independent Study
Spring 2008	EP231	231	Cont Areas-Egr Phy	EP	Engineering Physics	1	Survey of areas of engineering physics. Discussion of specific problems in fields such as space science, fluid and plasma dynamics, thermal science, lasers, instrumentation, materials research, and nuclear engineering.	UG	LE	Lecture
Spring 2008	EP322	322	Applied Optics	EP	Engineering Physics	4	(Also listed as PHY 322.) Study of optical instruments by means of both geometrical and physical optics. Theory and application of interferometry and light detection devices. Brief introduction to lasers and holography. Three hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	EP322L	322L	Lab	EP	Engineering Physics	0		UG	LB	Lab
Spring 2008	EP400	400	Semiconductor Materials	EP	Engineering Physics	3	(Also listed as PHY 400.) Crystal structure, energy bands, charge carriers, and carrier motion in semiconductors. Electrical and optical properties. P-N junction diodes. Equilibrium, dc, ac, and transient characteristics. Metal-Semiconductor junctions. Diode design.	UG	LE	Lecture
Spring 2008	EP401	401	Semiconduct Device Phy	EP	Engineering Physics	3	(Also listed as PHY 401.) Covers structure and characteristics of bipolar transistors, field effect transistors, and other selected devices. Includes design and computer modeling of devices.	UG	LE	Lecture
Spring 2008	EP402	402	Semincond Dev Processing	EP	Engineering Physics	3	(Also listed as PHY 402). Survey of the individual processes used in fabricating semiconductor devices. Integration of these processes to produce MOS and bipolar structures. Computer design aids.	UG	LB	Lab
Spring 2008	EP432	432	Lasers	EP	Engineering Physics	3	(Also listed as PHY 432). Introduction to the physics of lasers including emission and absorption processes in lasing, the factors controlling laser gain, the properties of optical resonators, and a survey of salient features for principal types of lasers.	UG	LE	Lecture

Spring 2008	EP432	432	Lasers	EP	Engineering Physics	3	(Also listed as PHY 432). Introduction to the physics of lasers including emission and absorption processes in lasing, the factors controlling laser gain, the properties of optical resonators, and a survey of salient features for principal types of lasers.	UG	LB	Lab
Spring 2008	EP440	440	Intro Nanosci/Nanotech	EP	Engineering Physics	4	Introduction to nanoscience and technology. Topics include introduction to quantum mechanics, fabrication, characterization, materials, electronic properties, optical properties, magnetic properties, devices, MEMS and NEMS.	UG	LE	Lecture
Spring 2008	EP440L	440L	Lab	EP	Engineering Physics	0		UG	LB	Lab
Spring 2008	EP470	470	Introduction to Sensors	EP	Engineering Physics	4	The course offers an overview of basic sensor technology to provide the engineering student with practical working knowledge of sensors. Course will include basic sensor operating principles, basic electronics and measurement principles.	UG	LE	Lecture

Spring 2008	EP470	470	Introduction to Sensors	EP	Engineering Physics	4	The course offers an overview of basic sensor technology to provide the engineering student with practical working knowledge of sensors. Course will include basic sensor operating principles, basic electronics and measurement principles.	UG	LB	Lab
Spring 2008	EP494	494	Engineering Phy Projects	EP	Engineering Physics	3	Independent design/development/research projects in engineering physics. A detailed written final report and seminar presentation are required. A project proposal must be approved by the program faculty before registration.	UG	SE	Seminar
Spring 2008	EP494W	494W	Writing in EP 494	EP	Engineering Physics	0	Required writing compnent for EP 494.	UG	LB	Lab
Spring 2008	EP499	499	Honors Egr-Phy Projects	EP	Engineering Physics	3	Independent design/development/research projects in engineering physics for departmental honors students. A final report, seminar presentation, and a journal submission are required. A project proposal must be approved by the program faculty before registration.	UG	IS	Independent Study
Spring 2008	EP499W	499W	Writing in EP 499	EP	Engineering Physics	0	Required writing component for EP 499.	UG	LB	Lab

Spring 2008	EP600	600	Semiconductor Materials	EP	Engineering Physics	3	(Also listed as PHY 600.) Study of crystal and electron band structure, selected topics in quantum theory; change carriers in semiconductors; electrical and optical properties; and the structure and characteristics of p-n junctions. Also, the generation, recombination, and motion of charge carriers.	GR	LE	Lecture
Spring 2008	EP601	601	Semiconductor Dev Physics	EP	Engineering Physics	3	(Also listed as PHY 601). Study of the structure and characteristics of bipolar transistors, field effect transistors, and other selected devices. Also covers design and computer modeling of devices.	GR	LE	Lecture
Spring 2008	EP602	602	Semiconductor Dev Process	EP	Engineering Physics	3	(Also listed as PHY 602). Survey of the individual processes used in fabricating semiconductor devices. Integration of these processes to produce MOS and bipolar structures. Computer design aids.	GR	LE	Lecture

Spring 2008	EP622	622	Applied Optics	EP	Engineering Physics	4	(Also listed as PHY 622). Study of the optical instruments by means of both geometric and physical optics. Theory and applications of interferometry and light detection devices. Brief introduction to lasers and holography. 4 hours lab for five weeks, 2 hours lecture.	GR	LL	Lecture/Lab Combination
Spring 2008	EP622L	622L	Lab	EP	Engineering Physics	0		GR	LB	Lab
Spring 2008	EP632	632	Lasers	EP	Engineering Physics	3	Introduction to the physics of lasers including emission and absorption processes in lasing, the factors controlling laser gain, the properties of optical resonators, and a survey of salient features for principal types of lasers.	GR	LB	Lab
Spring 2008	EP632	632	Lasers	EP	Engineering Physics	3	Introduction to the physics of lasers including emission and absorption processes in lasing, the factors controlling laser gain, the properties of optical resonators, and a survey of salient features for principal types of lasers.	GR	LE	Lecture
Spring 2008	ES701	701	Sel Topics in Env Sci	ES	Environmental Sciences	1		GR	LR	Lecture/Recitation Combination

Spring 2008	ES702	702	Subsurface Processes	ES	Environmental Sciences	3	Transport, transformation, and fate of solutes and contaminants in the vadose zone and the saturated zone. Processes include their advection, dispersion, solution, volatilization, sorption, and acid-base, precipitation, complexation, oxidation-reduction, hydrolysis, microbial and isotopic reactions.	GR	LE	Lecture
Spring 2008	ES703	703	Env Resource Sustain	ES	Environmental Sciences	3	This course will help students construct a framework for developing sustainable solutions to environmental problems. Potential technological, economic, and policy-related approaches to sustainability will be discussed for a variety of environmental problems.	GR	LE	Lecture
Spring 2008	ES704	704	Env Stressor Ident	ES	Environmental Sciences	3	This course details methods used for identifying natural and anthropogenic environmental stressors. Physical, chemical, and biological assessment methods are described showing how they are used in an integrated, interdisciplinary assessment design.	GR	LE	Lecture
Spring 2008	ES705	705	Env Policy & Regulation	ES	Environmental Sciences	3	This course will provide students with an extensive background in the policies underlying environmental law and regulation with special emphasis on experience in the United States.	GR	LR	Lecture/Recitation Combination

Spring 2008	ES706	706	Intro Environmental Stat	ES	Environmental Sciences	4	Introduction to sampling schemes, exploratory data analysis, probability distributions, and statistical methods for environmental data, confidence, prediction and tolerance intervals. Introduction to linear models, simulation and risk assessment and stochiastic processes.	GR	LE	Lecture
Spring 2008	ES707	707	Lab Rotation	ES	Environmental Sciences	4	Independent study designed to develop proficiency in technology, instrumentation, research design, and data analysis in an area of concentration different from a student's area of specialization.	GR	LB	Lab
Spring 2008	ES708	708	Introduction to Research	ES	Environmental Sciences	1	Introduces Environmental Sciences students to the ongoing research activities in the departments of biological sciences, chemistry, and geological sciences; involves presentations by ES faculty.	GR	LE	Lecture
Spring 2008	ES709	709	Persepctives in Env Sci	ES	Environmental Sciences	1	Explores current topics and contemporary research programs and ideas in Environmental Sciences.	GR	SE	Seminar
Spring 2008	ES710	710	Hist of Environmentalism	ES	Environmental Sciences	3	This course, through readings and lectures, uses the historical records to identify the constants in human behavior and institutions and evaluates the adaptations that have been made to address environmental issues.	GR	LE	Lecture

Spring 2008	ES712	712	Env BIo Genes Org & Eco	ES	Environ mental Sciences	3	Graduate level introduction to environmental biology at multiple levels of biological organization including molecular biology, organismal physiology and evolutionary biology, and community and ecosystem ecology.	GR	LE	Lecture
Spring 2008	ES714	714	Environmental Statistics	ES	Environ mental Sciences	4	Statistical techniques for the modeling and analysis of spatial and time-series environmental data, including spatio-temporal analysis, using appropriate software. Applications and case studies.	GR	LE	Lecture
Spring 2008	ES715	715	Risk Assessment & Commun	ES	Environ mental Sciences	4	The risk assessment paradigm is described while focusing on understanding and integrating complex effects and exposure issues in the risk characterization component of the process. The strengths and limitations of currently used methods will be examined.	GR	LE	Lecture
Spring 2008	ES716	716	Complexity in Env System	ES	Environ mental Sciences	4	Explores quantitative analysis, modeling and forecasting the behavior of nonlinear complex environmental systems. Introduces the concepts and tools for analyzing and modeling: scaling in space and time, feedback, and self-organization.	GR	LE	Lecture

Spring 2008	ES718	718	Chem Processes in Envir	ES	Environmental Sciences	3	Skills are developed to predict behavior and movement of chemical contaminants in atmospheric, aquatic and soil systems. Physical and chemical properties of contaminants and environmental interactions are evaluated to determine their ultimate fate.	GR	LE	Lecture
Spring 2008	ES756	756	Biology of Ecosystems	ES	Environmental Sciences	3	This course will study the development of the ecosystem concepts and the traditional ways in which organisms can alter ecosystem dynamics through physical or chemical interaction with their environments.	GR	LE	Lecture
Spring 2008	ES761	761	Geol & Env Applica GIS	ES	Environmental Sciences	4	Study the principles of GIS and its applications to environmental problems. Lectures and project are designed to explore GIS data source, format, acquisition, integration, and analysis, and the processes of decision-making using GIS.	GR	LE	Lecture
Spring 2008	ES763	763	Remote Sensing Applica	ES	Environmental Sciences	4	Students study how computer enhancement and calibration of satellite and aerial digital imagery can help in analyzing and solving geological and environmental problems.	GR	LE	Lecture

Spring 2008	ES765	765	Comp Tools/Strategieses	ES	Environmental Sciences	4	This is a survey course of modern computational tools and strategies used in sequence, 3-D structure and functional analysis of biomolecules. Students will gain hands on "laboratory" experience with key software and strategies.	GR	LE	Lecture
Spring 2008	ES799	799	Indep Topics & Research	ES	Environmental Sciences	1	Research and problems designed for specific needs and talents of the students.	GR	IS	Independent Study
Spring 2008	ES808	808	Internship Option	ES	Environmental Sciences	5	The internship option is available to second year PhD students wishing to gain experience with an environmental professional in an approved interdisciplinary job setting and providing opportunity to formulate a dissertation research topic.	GR	IN	Internship
Spring 2008	ES809	809	Env and Research Ethics	ES	Environmental Sciences	1	Ethics underpin the way we act. This course will provide students with an understanding of ethics generally, and as they apply in environmental and research settings.	GR	LR	Lecture/Recitation Combination
Spring 2008	ES810	810	Env Mgt & Economics	ES	Environmental Sciences	2	This course provides students with an overview of the key issues faced by environment managers, particularly economic considerations.	GR	LR	Lecture/Recitation Combination

Spring 2008	ES811	811	Env Problem Solving	ES	Environmental Sciences	2	Capstone course bringing together all the interdisciplinary aspects of the Environmental Sciences Ph.D. Program; involves small group problem solving exercises.	GR	LR	Lecture/Recitation Combination
Spring 2008	ES813	813	Dissertation Research	ES	Environmental Sciences	1	Planning and execution of scholarly original research of a quality that is publishable in a refereed scientific journal. Research must be communicated to the Supervisory Committee in written form and defended by public oral examination.	GR	IS	Independent Study
Spring 2008	EXB194	194	Careers in EH, EXB, CL, BIO	EXB	Exercise Biology	1	Provide students with an overview of the programs and career options in Biology, Clinical Laboratory Science, Exercise Biology and Environmental Science.	UG	LE	Lecture
Spring 2008	EXB260	260	EKG Interpretation	EXB	Exercise Biology	2	A course to foster the development of basic knowledge and essential sills needed to identify and interpret EKG strips. In addition, basic cardiovascular medications and their probable influence on exercise performance will be described.	UG	LE	Lecture
Spring 2008	EXB352	352	Human Biomechanics	EXB	Exercise Biology	4	Analysis of muscular interrelationships in basic body movements; analysis of principles of mechanics as they relate to fundamental & complext motor skills.	UG	LE	Lecture
Spring 2008	EXB352L	352L	Lab	EXB	Exercise Biology	0		UG	LB	Lab

Spring 2008	EXB352W	352W	Writing in EXB	EXB	Exercise Biology	0		UG	LB	Lab
Spring 2008	EXB353	353	Exercise Physiology I	EXB	Exercise Biology	4	Physiological adjustments and changes occurring in the human organishm as a result of homeostatic challenges.	UG	LE	Lecture
Spring 2008	EXB353L	353L	Exercise Physiology I Lab	EXB	Exercise Biology	0	Required laboratory for EXB 353.	UG	LB	Lab
Spring 2008	EXB354	354	Exercise Physiology II	EXB	Exercise Biology	4	Exercise physiology as it is applied to fitness and performance. Programs that distinguish between health-related fitness and physiology of maximal performance will be discussed.	UG	LE	Lecture
Spring 2008	EXB354L	354L	Lab in EXB	EXB	Exercise Biology	0		UG	LB	Lab
Spring 2008	EXB450	450	Clin Exercise Phys I	EXB	Exercise Biology	4	This course is a study of clinical exercise physiology with an emphasis on the cardio vascular system. Standards of practice for both physiological assessment and exercise prescription are based on guidelines established by the A.C.S.M.	UG	LE	Lecture
Spring 2008	EXB450L	450L	Clin Exercise Phys I Lab	EXB	Exercise Biology	0	Required laboratory for EXB 450.	UG	LB	Lab
Spring 2008	EXB451	451	Clin Exercise Phys II	EXB	Exercise Biology	4	This course is a study of clinical exercise physiology with an emphasis on pulmonary, metabolic, orthopedic and neuromuscular disorders. Standards of practice are based on the guidelines established by the A.C.S.M.	UG	LE	Lecture

Spring 2008	EXB451L	451L	Lab in EXB	EXB	Exercise Biology	0		UG	LB	Lab
Spring 2008	EXB451W	451W	Writing in EXB 451	EXB	Exercise Biology	0		UG	LB	Lab
Spring 2008	EXB452	452	Exercise Pharmacology	EXB	Exercise Biology	3	Exercise pharmacology concerns the effect of exercise on the therapeutic actions of commonly used prescription and over-the-counter drugs. The effect of drugs on athletic performance is also emphasized.	UG	LE	Lecture
Spring 2008	EXB455	455	Cardiac Rehabilitation	EXB	Exercise Biology	4	An in-depth study of the primary responsibilities regarding the development and directing of safe and effective clinical exercise programs and secondary preventive services for the cardiac and pulmonary patient.	UG	LE	Lecture
Spring 2008	EXB455L	455L	Lab in Cardiac Rehabilitation	EXB	Exercise Biology	0		UG	LB	Lab
Spring 2008	EXB466	466	Internship Exercise Bio	EXB	Exercise Biology	4	Designed to involve exercise science students in a culminating practicum experience in their field of study during their senior year. The experience involved work site training or a research project.	UG	IN	Internship
Spring 2008	EXB482	482	Exercise Biology Seminar	EXB	Exercise Biology	1	A culmination, in-depth, synthesis of the research literature pertaining to the field of exercise science.	UG	SE	Seminar

Spring 2008	EXB650	650	Clinical Exercise Phys I	EXB	Exercise Biology	4	Study of clinical exercise physiology with an emphasis on the cardiopulmonary system which includes how to contruct, administer, and interpret various types of cardiopulmonary assessment instruments.	GR	LL	Lecture/Lab Combination
Spring 2008	EXB651	651	Clinical Exercise Phys II	EXB	Exercise Biology	4	Study of Clinical Exercise Physiology with emphasis on pulmonary, metabolic, orthopedic, and neuromuscular disorders. Physiological assessment and exercise prescription standards are based on the guidelines established by the A.C.S.M.	GR	LL	Lecture/Lab Combination
Spring 2008	EXB653	653	Exercise Physiology I	EXB	Exercise Biology	4	Theroretical and practical study of the effects of exercise on the human organism with specific consideration given to bioenergetics, neuromuscular concepts, respiration, acid base balances, cardiorespiratory responses, and endocrinology.	GR	LL	Lecture/Lab Combination
Spring 2008	EXB654	654	Exercise Physiology II	EXB	Exercise Biology	4	Theoretical and practical study of the effects of exercise on the human organism with specific consideration given to aspects in applied exercise physiology.	GR	LE	Lecture

Spring 2008	EXB655	655	Cardiac Rehabilitation	EXB	Exercise Biology	4	An in-depth study of the primary responsibilities regarding the development and directing of safe and effective clinical exercise programs and secondary preventive services for the cardiac and pulmonary patient.	GR	LE	Lecture
Spring 2008	EXB655L	655L	Cardiac Rehabilitation Lab	EXB	Exercise Biology	0		GR	LB	Lab
Spring 2008	FIN205	205	Personal Fin Decision	FIN	Finance	4	Provides knowledge that helps students effectively manage their personal financial affairs. Topics include personal financial statements, budgeting, tax planning, investing and savings, consumer borrowing, insurance, real estate, and retirement planning.	UG	LE	Lecture
Spring 2008	FIN205W	205W	Writing in FIN 205	FIN	Finance	0	Required writing component for FIN 205.	UG	LB	Lab
Spring 2008	FIN310	310	Financial Management I	FIN	Finance	4	Introduction to the basic concepts, principles, and analytical techniques of financial management. Topics include financial planning and analysis, risk and return, time value of money, cost of capital, capital budgeting, and capital structure.	UG	LE	Lecture

Spring 2008	FIN311	311	Financial Management II	FIN	Finance	4	Continuation of Finance 310. Emphasis is on financial decisions. Topics include dividend policy, current asset management and financing, derivatives and risk management, international finance, hybrid forms of financing, and mergers and acquisitions.	UG	LE	Lecture
Spring 2008	FIN315	315	Foundations of Fin Plan	FIN	Finance	4	This course introduces basic concepts and techniques of financial planning from the perspective of a professional financial planner.	UG	LE	Lecture
Spring 2008	FIN315W	315W	Writing in FIN 315	FIN	Finance	0		UG	LB	Lab
Spring 2008	FIN331	331	Real Estate Prin&Pract	FIN	Finance	4	Introduction to the principles and practices of real estate. Topics include the real estate profession and industry, real estate contracts, market analysis, valuation approaches, financing techniques, investment analysis, and home ownership. Successful completion of this course meets part of the licensing requirements for real estate salespeople in Ohio.	UG	LE	Lecture

Spring 2008	FIN332	332	Real Estate Law	FIN	Finance	4	Includes all areas of law commonly concerned with the typical real estate practitioner and investor-consumer. Topics include the law of agency as applied to real estate brokers and salespeople, law of fixtures, estates (including leases), conveyancing of real estate, real estate managers, zoning, cooperatives, condominiums, and license laws of Ohio. Successful completion of this course meets part of the licensing requirements for real estate salespeople in Ohio.	UG	LE	Lecture
Spring 2008	FIN351	351	Risk and Insurance	FIN	Finance	4	Introduction to principles and practices of personal risk management and insurance. Topics include property and liability insurance, life insurance, disability insurance, health insurance, and social security.	UG	LE	Lecture
Spring 2008	FIN400	400	Analysis of Corp Fin Inf	FIN	Finance	4	The objective of this course is to analyze corporate financial information from an investment analyst persepective.	UG	LE	Lecture
Spring 2008	FIN400W	400W	Writing in FIN 400	FIN	Finance	0	Required writing component for FIN 400.	UG	LB	Lab
Spring 2008	FIN401	401	Investing in Securities	FIN	Finance	4	Introduction to the theory and practice of investing in stocks, bonds, and other securities.	UG	LE	Lecture

Spring 2008	FIN402	402	Seminar in Investments	FIN	Finance	4	Advanced treatment of the theory and practice of investing. Provides opportunities for individual investigation of selected topics.	UG	SE	Seminar
Spring 2008	FIN403	403	Real Money Investing	FIN	Finance	4	This two-quarter course provides hands-on experience in managing real money. The students manage an investment portfolio using money from the University Foundation. The course helps students learn about asset valuation and allocation, and portfolio management.	UG	LE	Lecture
Spring 2008	FIN404	404	Fixed Income Securities	FIN	Finance	4	The objective of this course is to provide students with an introduction to the valuation of fixed income securities and the management of fixed income investment portfolios.	UG	LE	Lecture
Spring 2008	FIN405	405	Financial Derivatives	FIN	Finance	4	The objective of this course is to provide students with an understanding of futures, options, and swaps.	UG	LE	Lecture
Spring 2008	FIN406	406	Security Analysis Portfolio	FIN	Finance	4	In this course students will be exposed to the tools, strategies, statistics and history of portfolio analysis in competitive securities markets.	UG	LE	Lecture
Spring 2008	FIN411	411	Mgt of Fin Institutions	FIN	Finance	4	Analysis of issues relating to the financial management of financial institutions.	UG	LE	Lecture

Spring 2008	FIN418	418	Financial Management III	FIN	Finance	4	Application of financial concepts and analytical techniques to financial decision making. Extensive use of cases.	UG	LE	Lecture
Spring 2008	FIN418W	418W	Writing in FIN 418	FIN	Finance	0	Required writing component for FIN 418.	UG	LB	Lab
Spring 2008	FIN419	419	Seminar in Corporate Fin	FIN	Finance	4	In-depth treatment of advanced problems in financial management. Writing Intensive.	UG	SE	Seminar
Spring 2008	FIN420	420	Seminar in Financial Mgt	FIN	Finance	4	In-depth treatment of advanced problems in managerial finance. Topics include capital budgeting, capital structure theory, cost of capital, dividend policy, and long-term financial management.	UG	SE	Seminar
Spring 2008	FIN430	430	Real Estate Fin & App	FIN	Finance	4	In depth study of real estate finance and the theory and practice of appraising real estate. Successful completion of this course meets part of the licensing requirements for real estate sales people in Ohio.	UG	LE	Lecture
Spring 2008	FIN435	435	Investing in Real Estate	FIN	Finance	4	Explores the theory and practice of real estate investment analysis as it relates to personal financial planning objectives.	UG	LE	Lecture

Spring 2008	FIN455	455	Adv Topics in Insurance	FIN	Finance	4	Advanced treatment of theory and practice of insurance as it relates to personal and business planning objectives. Examination of selected topics and issues. Prerequisite FIN 351 or permission of instructor.	UG	LE	Lecture
Spring 2008	FIN461	461	Retirement Planning	FIN	Finance	4	Familiarizes students with the concepts of retirement planning and employee benefits and the application of these concepts to overall financial planning for individuals and small businesses.	UG	LE	Lecture
Spring 2008	FIN461W	461W	Writing in FIN 461	FIN	Finance	0	Required writing component for FIN 461.	UG	LB	Lab
Spring 2008	FIN462	462	Estate Planning	FIN	Finance	4	Provides a theoretical and practical approach to estate planning. Includes estate and gift taxes, wills, trusts, and estate planning techniques.	UG	LE	Lecture
Spring 2008	FIN470	470	Practicum in Fin Plan	FIN	Finance	4	Students participate in financial planning laboratories and attend workshops on interviewing techniques, data gathering, plan preparation, and computerized planning models. For financial services majors only.	UG	LE	Lecture
Spring 2008	FIN477	477	Finance Studies	FIN	Finance	1	Independent study in selected areas of finance or financial services.	UG	LE	Lecture
Spring 2008	FIN478	478	Hon: Ind Study in Finance	FIN	Finance	1	Research in finance for fulfillment of the Honors program project requirement.	UG	IS	Independent Study

Spring 2008	FIN480	480	Special Topics in Fin	FIN	Finance	4	Seminar in a finance topic of current and timely interest. Topics and prerequisites vary.	UG	SE	Seminar
Spring 2008	FIN481	481	Internship in Finance	FIN	Finance	1	One-quarter faculty-supervised internship in finance. Students work in a firm or public agency, participate in seminars, and submit reports. Topics vary.	UG	IN	Internship
Spring 2008	FIN490	490	International Fin Mgt	FIN	Finance	4	Study of the international aspects of financial management. Topics include foreign exchange management, international capital budgeting, international financing, tax planning, and working capital management.	UG	LE	Lecture
Spring 2008	FIN702	702	Mgt of Fin Institutions	FIN	Finance	4	Analysis of issues relating to the financial management of financial institutions.	GR	LE	Lecture
Spring 2008	FIN710	710	Investment Management	FIN	Finance	4	Concepts, theories, and techniques underlying the development of investment policies and strategies.	GR	LE	Lecture
Spring 2008	FIN711	711	Seminar in Investments	FIN	Finance	4	Advanced treatment of selected topics in investments including options, futures, and portfolio theory.	GR	SE	Seminar
Spring 2008	FIN742	742	Sem in Financial Managemt	FIN	Finance	4	Advanced treatment of the theory and practice of long-term financial management. Topics include dividends, leasing, hybrid financing, derivatives and risk management, mergers and acquisitions, and divestitures.	GR	SE	Seminar

Spring 2008	FIN743	743	Sem in Wkg Capital Mgt	FIN	Finance	4	Advanced treatment of the theory and practice of working capital management, including cash management, credit policy, inventory policy, and short-term financing strategies. Extensive use of outside readings.	GR	SE	Seminar
Spring 2008	FIN750	750	Fin Mgt Health Care Organ	FIN	Finance	4	Overview of the financial management function in health care organizations. Topics include budgeting, control, capital expenditure analysis, and rate settings.	GR	LE	Lecture
Spring 2008	FIN760	760	Special Topics in Fin	FIN	Finance	4	In-depth analysis of a current trend in finance. Titles vary.	GR	LE	Lecture
Spring 2008	FIN780	780	Finance Internship	FIN	Finance	4	One-quarter internship in a selected private or governmental organization under the direction of a faculty advisor and employment supervisor.	GR	IN	Internship
Spring 2008	FIN781	781	Special Studies Fin	FIN	Finance	1	Intensive reading or research in a selected field of advanced finance.	GR	IS	Independent Study
Spring 2008	FIN789	789	Continuing Registration	FIN	Finance	1		GR	IS	Independent Study
Spring 2008	FIN790	790	Sem Interntl Fin Manag	FIN	Finance	4	Advanced treatment of the concepts and techniques of international financial management.	GR	SE	Seminar
Spring 2008	FIN799	799	Thesis	FIN	Finance	1		GR	IS	Independent Study
Spring 2008	FMD600	600	Student Initiated Elective	FMD	Family Medicine	2		MD	LE	Lecture

Spring 2008	FMD601	601	Family Medicine Preceptorship	FMD	Family Medicine	2		MD	CL	Clinical
Spring 2008	FMD602	602	Family Med Preceptorship AHEC	FMD	Family Medicine	2		MD	LE	Lecture
Spring 2008	FMD604	604	Intro to Sports Medicine	FMD	Family Medicine	2		MD	LE	Lecture
Spring 2008	FMD610	610	Family Med Preceptorship-MVH	FMD	Family Medicine	2		MD	LE	Lecture
Spring 2008	FMD611	611	Family Prac in Community Hosp	FMD	Family Medicine	2		MD	LE	Lecture
Spring 2008	FMD612	612	Behavioral Health in Fam Med	FMD	Family Medicine	2		MD	CL	Clinical
Spring 2008	FMD613	613	FM Precept Dayton Community	FMD	Family Medicine	2		MD	CL	Clinical
Spring 2008	FMD700	700	Family Medicine Clerkship	FMD	Family Medicine	11		MD	CL	Clinical
Spring 2008	FMD800	800	Student-Initiated Elective	FMD	Family Medicine	4		MD	CL	Clinical
Spring 2008	FMD801	801	Fam Doc, Community Setting	FMD	Family Medicine	8		MD	CL	Clinical
Spring 2008	FMD802	802	Primary Care Clin Experience	FMD	Family Medicine	8		MD	CL	Clinical
Spring 2008	FMD803	803	JI Family Medicine	FMD	Family Medicine	8		MD	CL	Clinical
Spring 2008	FMD805	805	Dental Consid in Med	FMD	Family Medicine	4		MD	CL	Clinical

Spring 2008	FMD806	806	JI Family Medicine	FMD	Family Medicine	8		MD	CL	Clinical
Spring 2008	FMD809	809	Computers: Clin Medicine	FMD	Family Medicine	4		MD	CL	Clinical
Spring 2008	FMD820	820	Advanced Family Medicine	FMD	Family Medicine	8		MD	CL	Clinical
Spring 2008	FMD900	900	Extramural Elective	FMD	Family Medicine	4		MD	H	Hospital
Spring 2008	FR101	101	First Yr French	FR	French	4	Communicative introduction to French structures and vocabulary and to French and Francophone cultures. Practice in speaking, listening, reading and writing.	UG	LE	Lecture
Spring 2008	FR102	102	First Yr French	FR	French	4	Communicative introduction to French structures and vocabulary and to French and Francophone cultures. Practice in speaking, listening, reading and writing.	UG	LE	Lecture
Spring 2008	FR103	103	First Yr French	FR	French	4	Communicative introduction to French structures and vocabulary and to French and Francophone cultures. Practice in speaking, listening, reading and writing.	UG	LE	Lecture
Spring 2008	FR111	111	Essentials of French	FR	French	4	Introduction to French with emphasis on speaking the language.	UG	LE	Lecture
Spring 2008	FR150	150	French Grammar Review	FR	French	4	A thorough review of French grammar with an emphasis on oral practice.	UG	LE	Lecture
Spring 2008	FR201	201	Second Yr French	FR	French	4	Grammar review, reading, and discussion of selected texts, with practice in speaking and writing the language.	UG	LE	Lecture

Spring 2008	FR202	202	Second Yr French	FR	French	4	Grammar review, reading, and discussion of selected texts, with practice in speaking and writing the language.	UG	LE	Lecture
Spring 2008	FR203	203	Second Yr French	FR	French	4	Grammar review, reading, and discussion of selected texts, with practice in speaking and writing the language.	UG	LE	Lecture
Spring 2008	FR311	311	French Conversation	FR	French	4	Practice in oral use of French emphasizing the culture of the French-speaking world.	UG	LE	Lecture
Spring 2008	FR312	312	French Conversation	FR	French	4	Practice in oral use of French emphasizing the culture of the French-speaking world.	UG	LE	Lecture
Spring 2008	FR313	313	French Conversation	FR	French	4	Practice in oral use of French emphasizing the culture of the French-speaking world.	UG	LE	Lecture
Spring 2008	FR321	321	French Composition	FR	French	4	321 and 322: Writing techniques and grammar review; written stylistic analyses.	UG	LE	Lecture
Spring 2008	FR321W	321W	Writing in FR 321	FR	French	0	Required writing component for FR 321.	UG	LB	Lab
Spring 2008	FR322	322	French Composition	FR	French	4	321 and 322: Writing techniques and grammar review; written stylistic analyses.	UG	LE	Lecture
Spring 2008	FR322W	322W	Writing in FR 322	FR	French	0		UG	LB	Lab
Spring 2008	FR323	323	French Composition	FR	French	4	Advanced grammar review; Study of linguistic functions/genres of writing through structural and stylistic analyses and pastiches of model texts.	UG	LE	Lecture
Spring 2008	FR323W	323W	Writing in French	FR	French	0		UG	LB	Lab

Spring 2008	FR325	325	Business French	FR	French	4	An introduction to the language of business French with insight into France's place in the global economy.	UG	LE	Lecture
Spring 2008	FR325W	325W	Writing in FR 325	FR	French	0		UG	LB	Lab
Spring 2008	FR331	331	Survey of French Literature	FR	French	4	Middle Ages to the present. Topics vary.	UG	LE	Lecture
Spring 2008	FR331W	331W	Writing in FR 331	FR	French	0		UG	LB	Lab
Spring 2008	FR332	332	Survey of Francophone Lit	FR	French	4	Survey of literature from one or more regions of the french-speaking world. Topics vary.	UG	LE	Lecture
Spring 2008	FR332W	332W	Writing in FR 332	FR	French	0		UG	LB	Lab
Spring 2008	FR351	351	French Civilization	FR	French	4	Study of the main currents of French civilization with emphasis on historical aspects. Conducted in French.	UG	LE	Lecture
Spring 2008	FR361	361	French Phonetics	FR	French	4	Pronunciation, diction, and intonation. Corrective exercises and laboratory work.	UG	LE	Lecture
Spring 2008	FR381	381	Applied Elem Fr Instruct	FR	French	1	French majors assist elementary course instructors in conducting classes. For French majors only.	UG	IS	Independent Study
Spring 2008	FR382	382	Applied Elem Fr Instruct	FR	French	1	French majors assist elementary course instructors in conducting classes. For French majors only.	UG	IS	Independent Study
Spring 2008	FR383	383	Applied Elem Fr Instruct	FR	French	1	French majors assist elementary course instructors in conducting classes. For French majors only.	UG	IS	Independent Study
Spring 2008	FR384	384	Applied Elementary Lang	FR	French	1	French majors assist elementary course instructors in conducting classes.	UG	LE	Lecture

Spring 2008	FR399	399	Studies Selected Subjects	FR	French	1		UG	IS	Independent Study
Spring 2008	FR403	403	Adv Studies:Lang Civiliza	FR	French	4	Conducted in French. Topics vary.	UG	LE	Lecture
Spring 2008	FR403W	403W	Writing in FR 403	FR	French	0	Required writing component for FR 403.	UG	LB	Lab
Spring 2008	FR421	421	Literature of Middle Ages	FR	French	4	Selected medieval texts: epic poems, romances, and plays.	UG	LE	Lecture
Spring 2008	FR422	422	Villon to Chenier	FR	French	4	Three centuries of French poetry: Villon, Marot, Du Bellay, Ronsard, d'Aubigne, Malherbe, La Fontaine, Boileau, Voltaire, and Chenier.	UG	LE	Lecture
Spring 2008	FR423	423	17th&18th Century Novel	FR	French	4	Selected novelists including Mme. de La Fayette, Scarron, Fenelon, Montesquieu, Lesage, Prevost, Diderot, and Laclos.	UG	LE	Lecture
Spring 2008	FR441	441	Libs&Moralsts: Rabel-Volt	FR	French	4	Currents of skepticism and humanism in French intellectual history. Major authors: Rabelais, Montaigne, Saint-Evremond, La Bruyere, La Rochefoucauld, Bayle, Fontenelle, Diderot, and Voltaire.	UG	LE	Lecture
Spring 2008	FR442	442	17th & 18th Cent Theatre	FR	French	4	Works of Corneille, Moliere, Racine, Marivaux, Diderot, Voltaire, and Beaumarchais.	UG	LE	Lecture
Spring 2008	FR443	443	The Enlightenment	FR	French	4	History of political and social ideas in 18th-century France. Based principally on works of Montesquieu, Diderot, Voltaire, and Rousseau.	UG	LE	Lecture
Spring 2008	FR450	450	Independent Research	FR	French	1	Topics vary.	UG	IS	Independent Study

Spring 2008	FR451	451	Romanticism	FR	French	4	Includes Bernardin de Saint-Pierre, Chateaubriand, Mme. de Stael, Nodier, Lamartine, Vigny, Musset, and Nerval.	UG	LE	Lecture
Spring 2008	FR452	452	Nineteenth Century Novel	FR	French	4	Chateaubriand, Constant, Stendhal, Balzac, Flaubert, Zola, and France.	UG	LE	Lecture
Spring 2008	FR453	453	Poetry:Baudelaire to Bret	FR	French	4	Symbolists, decadents, and surrealists.	UG	LE	Lecture
Spring 2008	FR454	454	19th Century Short Story	FR	French	4	Intensive study of such authors as Merimee, Gautier, Balzac, Flaubert, Maupassant, and Villiers de l'Isle Adam.	UG	LE	Lecture
Spring 2008	FR454W	454W	Writing in FR 454	FR	French	0		UG	LB	Lab
Spring 2008	FR462	462	20th Cent Fr Lit	FR	French	4	The novel.	UG	LE	Lecture
Spring 2008	FR462W	462W	Writing in FR 462	FR	French	0		UG	LB	Lab
Spring 2008	FR463	463	20th Cent Lit: Drama	FR	French	4	Drama.	UG	LE	Lecture
Spring 2008	FR464	464	20th Cent Fr Lit	FR	French	4	Poetry.	UG	LE	Lecture
Spring 2008	FR465	465	French/Francophone Lit	FR	French	4	Selected topics in French and Francophone literature and film that investigate various themes, myths, genres, literary movements, or characters. Titles vary.	UG	LE	Lecture
Spring 2008	FR465W	465W	Writing in FR 465	FR	French	0	Required writing component for FR 465.	UG	LB	Lab
Spring 2008	FR481	481	Independent Reading	FR	French	4	Topics vary.	UG	IS	Independent Study
Spring 2008	FR482	482	Independent Reading	FR	French	4	Topics vary.	UG	IS	Independent Study
Spring 2008	FR511	511	French Conversation	FR	French	4	Practice in oral use of French emphasizing the culture of the French-speaking world.	GR	LE	Lecture

Spring 2008	FR512	512	French Conversation	FR	French	4	Practice in oral use of French emphasizing the culture of the French-speaking world.	GR	LE	Lecture
Spring 2008	FR521	521	French Composition	FR	French	4	Writing techniques and grammar review; written stylistic analyses.	GR	LE	Lecture
Spring 2008	FR522	522	French Composition	FR	French	4	Writing techniques and grammar review; written stylistic analyses.	GR	LE	Lecture
Spring 2008	FR523	523	French Composition	FR	French	4	Introduction to written literary analysis of poetry, prose, and drama.	GR	LE	Lecture
Spring 2008	FR525	525	Business French	FR	French	4	An introduction to the language of business French with insight into France's place in the global economy.	GR	LE	Lecture
Spring 2008	FR526	526	Business French: Quebec	FR	French	4	Web enhanced exploration of business language, culture and practices in Quebec.	GR	LE	Lecture
Spring 2008	FR531	531	Survey of French Lit	FR	French	4	Middle Ages to the present. Topics vary.	GR	LE	Lecture
Spring 2008	FR532	532	Survey of Francophone Lit	FR	French	4	Survey of literature from one or more regions of the Francophone world. Topics vary.	GR	LE	Lecture
Spring 2008	FR551	551	French Civilization	FR	French	4	Study of the main currents of French civilization with emphasis on historical aspects.	GR	LE	Lecture
Spring 2008	FR581	581	Applied Elem Fr Instr	FR	French	1	Assistance for elementary course instructors in conducting French classes.	GR	IN	Internship
Spring 2008	FR582	582	Applied Elementary Lang	FR	French	1	Graduate students assist elementary course instructors in conducting classes.	GR	LE	Lecture
Spring 2008	FR583	583	Applied Elementary Lang	FR	French	1	Graduate students assist elementary course instructors in conducting class.	GR	LE	Lecture

Spring 2008	FR584	584	Applied Elementary Lang	FR	French	1	Graduate students assist elementary course instructors in conducting class.	GR	LE	Lecture
Spring 2008	FR590	590	Foreign Lang Institute	FR	French	8	For teachers of French. Intensive experience designed, through total immersion, to improve language skills (conversation and composition) and increase awareness of French civilization and contemporary culture.	GR	IS	Independent Study
Spring 2008	FR599	599	Studies in Selected Subj	FR	French	1	Graduate level treatment to problems, approaches and topics in the field of French. Topics vary.	GR	LE	Lecture
Spring 2008	FR603	603	Adv Studies: Lang Civiliza	FR	French	4	Course content will vary. Topic chosen by instructor. Conducted in French.	GR	LE	Lecture
Spring 2008	FR622	622	Villon to Chenier	FR	French	4	Three centuries of French poetry: Villon, Sceve, Marot, Du Bellay, Ronsard, d'Aubigne, Malherbe, La Fontaine, Bioleau, Voltaire, Chenier.	GR	LE	Lecture
Spring 2008	FR623	623	17th&18th Cent Novel	FR	French	4	Mme de La Fayette, Scarron, Finelon, Montesquieu, Lesage, Privost, Diderot, and Ladlos. Graduate standing and instructor permission required.	GR	LE	Lecture

Spring 2008	FR641	641	Libertines and Moralists	FR	French	4	Libertines and Moralista: From Rabelais to Voltaire: Currents of skepticism and humanism in the intellectual history of France. Major authors: Rabelais, Montaigne, Cyrano de Bergerac, Saint-Evremond, La Bruyere, La Rochefoucauld, Bayle, Fontenelle, Diderot, Voltaire.	GR	LE	Lecture
Spring 2008	FR642	642	17th & 18th Cent Theatre	FR	French	4	Works of Corneille, Moliere, Racine, Marivaux, Diderot, Voltaire, Beaumarchais.	GR	LE	Lecture
Spring 2008	FR643	643	The Enlightenment	FR	French	4	History of political and social ideas in eighteenth-century France. Based principally on works of Montesquieu, Diderot, Voltaire, and Rousseau.	GR	LE	Lecture
Spring 2008	FR650	650	Independent Grad Research	FR	French	1	Independent graduate research.	GR	IS	Independent Study
Spring 2008	FR651	651	French Romanticism	FR	French	4	From Rousseau to Hugo. Includes Bernardin de St. Pierre, Chateaubriand, Mme de Stael, Nodier, Lamartine, Vigny, Musset, Nerval.	GR	LE	Lecture
Spring 2008	FR652	652	Nineteenth Century Novel	FR	French	4	Chateaubriand, Constant, Stendhal, Balzac, Flaubert, Zola, and France.	GR	LE	Lecture
Spring 2008	FR653	653	Poetry: Baudel. to Breton	FR	French	4	Symbolists, Decadents, and Surrealists.	GR	LE	Lecture
Spring 2008	FR654	654	19th Century Short Story	FR	French	4	Intensive study of such authors as Balzac, Stendhal, Nodier, Mirimie, Flaubert, Maupassant, and Huysmans.	GR	LE	Lecture

Spring 2008	FR662	662	Twentieth Century Lit	FR	French	4	The novel.	GR	LE	Lecture
Spring 2008	FR663	663	20th Cent Lit: Drama	FR	French	4	Study of modern French theatre including: Cocteau, Giraudoux, Anouilh, Beckett, Ionesco.	GR	LE	Lecture
Spring 2008	FR665	665	Problems in French Lit	FR	French	4	Examination of selected topics in French literature to investigate various themes, myths, genres, literary movements, or characters. Titles vary.	GR	LE	Lecture
Spring 2008	FR681	681	Ind Read for Grad Student	FR	French	4	Independent reading for graduate students.	GR	IS	Independent Study
Spring 2008	FR682	682	Ind Read for Grad Student	FR	French	4	Independent reading for graduate students.	GR	IS	Independent Study
Spring 2008	GEO201	201	Prin Physical Geography	GEO	Geography	4	Study of the elements of the human natural environment at regional and global scales including examination of the interactions among climate, soils, vegetation, landscapes, and people.	UG	LE	Lecture
Spring 2008	GEO202	202	Prin Cultural Geography	GEO	Geography	4	Study of major cultural elements of the human environment including examination of their spatial interactions and factors influencing their location and distribution.	UG	LE	Lecture
Spring 2008	GEO203	203	Prin Economic Geography	GEO	Geography	4	Examination of the principal geographic factors influencing human activities related to production, exchange, and consumption of goods and services.	UG	LE	Lecture

Spring 2008	GEO249	249	Global Awareness	GEO	Geography	4	Introduction to maps and their uses as a means to gain global awareness.	UG	LE	Lecture
Spring 2008	GEO302	302	Political Geography	GEO	Geography	4	Geographic appraisal of factors influencing evolution, structure, resource base, function, and associations of political units.	UG	LE	Lecture
Spring 2008	GEO317	317	Urban Planning I: Intro	GEO	Geography	4	Examination of the development of city planning as a professional discipline. Consideration of the contributions to planning by the arts and sciences. Selected activities and functions of contemporary urban planning agencies are viewed from the perspective of current urban problems.	UG	LE	Lecture
Spring 2008	GEO318	318	Urban Planning II: Princ	GEO	Geography	4	Includes the role of planning in urban structures, and duties and responsibilities of planning commissions; process of preparing comprehensive plans; population change, the economic base, and employment change; and determinants of future urban structure.	UG	LE	Lecture
Spring 2008	GEO322	322	Princ of Geomorphology	GEO	Geography	4	Distribution of world's landforms with emphasis on processes and systems functioning to shape the natural landscape. Attention to three-way interaction among landforms, other physical factors, and people.	UG	LE	Lecture

Spring 2008	GEO325	325	World Regional Geography	GEO	Geography	4	Discussion of the nature of selected world regions and their spatial relationships. Emphasizes the unique characteristics of the cultures and landscapes of these regions applying basic geographic concepts.	UG	LE	Lecture
Spring 2008	GEO334	334	Climatol Earth Sci Teachs	GEO	Geography	4	Interaction of weather and climate with various earth systems. Includes observation, measurement, and analysis of meteorological elements and controls. For nonmajors only.	UG	LE	Lecture
Spring 2008	GEO340	340	Urban Geography	GEO	Geography	4	General nontechnical introduction to urban geography focusing on major geographic concepts and principles relating to location, function, and structure of urban areas.	UG	LE	Lecture
Spring 2008	GEO343	343	Geo-Spatial Applications	GEO	Geography	4	Examination of selected concepts, generalizations, and research methods of urban geography with emphasis on the spatial structure of residential populations, distribution of social pathologies, and segregation of social groups.	UG	LE	Lecture
Spring 2008	GEO353	353	Location Theory	GEO	Geography	4	Study of theoretical aspects of the location of human activities. Introduction to theories and concepts regarding location and spatial arrangement of economic activities.	UG	LE	Lecture

Spring 2008	GEO354	354	Geo of Manufacturing	GEO	Geography	4	Factors of industrial location using empirical examples. Includes introduction to basic theories and techniques underlying the decision process in manufacturing locations.	UG	LE	Lecture
Spring 2008	GEO360	360	Systematic Geography	GEO	Geography	4	Analysis of various geographic factors. Topics vary.	UG	LE	Lecture
Spring 2008	GEO361	361	Remote Sensing	GEO	Geography	4	Basic survey of imaging remote sensor types and their operational characteristics including sensors for the ultraviolet, visual, infrared, and microwave portions of the electromagnetic spectrum.	UG	LE	Lecture
Spring 2008	GEO361L	361L	GEO Lab	GEO	Geography	0		UG	LB	Lab
Spring 2008	GEO361W	361W	Writing in GEO 361	GEO	Geography	0	Required writing component for GEO 361.	UG	LB	Lab
Spring 2008	GEO362	362	Remote Sensing of Environ	GEO	Geography	4	Application of remote sensing techniques to environmental and resource problems. Emphasis on optimizing sensor selection to enhance image information content.	UG	LE	Lecture
Spring 2008	GEO365	365	Cartography	GEO	Geography	5	Principles of map projections, their construction, and their use in illustrating geographic relationships. Includes methods of design compilation and graphic representation of data.	UG	LE	Lecture
Spring 2008	GEO365L	365L	GEO Lab	GEO	Geography	0		UG	LB	Lab
Spring 2008	GEO370	370	Regional Geo	GEO	Geography	4	Physical and cultural analysis of major and minor world regions. Topics vary.	UG	LE	Lecture

Spring 2008	GEO370W	370W	Writing in GEO 370	GEO	Geography	0		UG	LB	Lab
Spring 2008	GEO375	375	Environmental Conservtn	GEO	Geography	4	Economic and geographic appraisal of resource conservation in the world, emphasizing an analytical approach to solving such contemporary problems as human population growth, environmental quality, recreation and open space, and resource management.	UG	LE	Lecture
Spring 2008	GEO385	385	Geographic Methodology	GEO	Geography	5	Examination of the nature, tools, methods, and techniques of geographic analysis. Emphasis on design, compilation, interpretation, and presentation of research materials.	UG	LE	Lecture
Spring 2008	GEO385W	385W	Writing in GEO 385	GEO	Geography	0		UG	LB	Lab
Spring 2008	GEO399	399	Studies in Selected Subj	GEO	Geography	1	Problems, approaches, and topics in the field of geography. Topics vary.	UG	IS	Independent Study
Spring 2008	GEO414	414	Urban Planning Seminar	GEO	Geography	4	Examination of urban plans and planning proposals. Includes future land use plans, community facilities and public utility plans, and traffic and circulation plans. Considers modern theories of planning and the planning and design of new communities.	UG	SE	Seminar

Spring 2008	GEO419	419	Urban Plan III: Land Use	GEO	Geography	4	Process of preparing comprehensive urban plans. Methods for assessing land use conditions, housing patterns, and urban deterioration. Students participate in the development of a land use plan for selected area.	UG	LE	Lecture
Spring 2008	GEO430	430	Climatology I	GEO	Geography	4	Observation, measurement, and analysis of climatic elements and controls, climatic classification, and relation of climate to human economic and social activities.	UG	LE	Lecture
Spring 2008	GEO431	431	Meteorology	GEO	Geography	4	Development and application of first principles governing the atmosphere at rest and in motion. Examination of the general circulation. Applied meterology.	UG	LE	Lecture
Spring 2008	GEO432	432	Climatology II	GEO	Geography	4	Principles of physical and dynamical climatology. Evaluation of local and regional transports and conversions of energy in the earth-atmosphere system.	UG	LE	Lecture
Spring 2008	GEO441	441	Sem in Urban Geography	GEO	Geography	4	Geographic perspective in the study of cities. Recent developments in theory, method, and techniques in urban geographic research with emphasis on the behavioral approach.	UG	SE	Seminar

Spring 2008	GEO445	445	Intermed Cartog&Map Inter	GEO	Geography	5	Study and practice of compilation processes for the development of maps and models using primary data sources.	UG	LE	Lecture
Spring 2008	GEO446	446	Map & Photo Interpre Lab	GEO	Geography	4	Uses of map and photographic data in close and long range photogrammetry. Emphasis on the full spectrum of photo interpretation as applied to the controlled mapping of terrestrial and marine surfaces.	UG	LB	Lab
Spring 2008	GEO447	447	Geographic Info Sci Prin	GEO	Geography	5	Principles, structures, and applications of geographic information systems and utilization of data from topographic, remotely sensed, and photogrammetric sources.	UG	LE	Lecture
Spring 2008	GEO448	448	ADV Geographic Info Sci	GEO	Geography	5	Students apply GIS techniques to solve public/private sector information and development problems. Solutions entail data analysis and forecasting, using ARC/INFO geographic information system methods.	UG	LE	Lecture
Spring 2008	GEO455	455	Geo of Transportation	GEO	Geography	4	An analysis of spatial aspects and structural characteristics of transport networks, the movement of goods, and their relationship to regional economic structures.	UG	LE	Lecture
Spring 2008	GEO455W	455W	Writing in GEO 455	GEO	Geography	0		UG	LB	Lab

Spring 2008	GEO458	458	Human Percept in Res Mgt	GEO	Geography	4	Spatial factors influencing human response and decision making in resource-use schema. Study of how people perceive environmental elements and apprehend resources and natural hazards such as floods and droughts.	UG	LE	Lecture
Spring 2008	GEO463	463	Geo Appl Rem-Sensed Data	GEO	Geography	4	Application of geographic methodology to problems employing photographic and machine-processed multispectral scanner data in contemporary use in academic research, environmental analysis, and planning.	UG	LE	Lecture
Spring 2008	GEO479	479	Landscape Urban Planning	GEO	Geography	5	A systematic approach to landscape analysis for urban site planning using basic data sources. Emphasis is on landscape capabilities for satisfying human needs and uses.	UG	LE	Lecture
Spring 2008	GEO481	481	Special Problems in Geo	GEO	Geography	1	Research and problems designed for specific needs and talents of students. Topics vary.	UG	LE	Lecture
Spring 2008	GEO482	482	Special Problems in Geo	GEO	Geography	1	Research and problems designed for specific needs and talents of students. Topics vary.	UG	LE	Lecture

Spring 2008	GEO484	484	Biogeography	GEO	Geography	3	(Also listed as BIO 484.) Introduction to factors affecting the geographical distribution of plants and animals. Students registering for three credit hours attend lectures only; registration for four credit hours requires an additional laboratory section.	UG	LE	Lecture
Spring 2008	GEO486	486	Foundations of Geography	GEO	Geography	4	A study of the evolution of the discipline through analyses of the approaches, emphases, methodologies, paradigms, and traditions in geography.	UG	LE	Lecture
Spring 2008	GEO486W	486W	Writing in GEO 486	GEO	Geography	0		UG	LB	Lab
Spring 2008	GEO492	492	Geography Internship	GEO	Geography	1	Provides geography majors 15 clock hours of practical experience under academic supervision each week during the quarter with a cooperating public agency or private firm. Topics vary. For geography majors only.	UG	IN	Internship
Spring 2008	GEO493	493	Honors Project in Geo	GEO	Geography	4	Provides geography majors of superior academic ability the opportunity to use, broaden, and demonstrate the knowledge and skills acquired.	UG	IS	Independent Study
Spring 2008	GEO494	494	Honors Project in Geo	GEO	Geography	4	Provides geography majors of superior academic ability the opportunity to use, broaden, and demonstrate the knowledge and skills acquired.	UG	IS	Independent Study

Spring 2008	GEO534	534	Climatol Earth Sci Teachs	GEO	Geography	4	Interaction of weather and climate with the various earth systems. Includes observation, measurement, and analysis of meteorological elements and controls.	GR	LE	Lecture
Spring 2008	GEO560	560	Systematic Geography	GEO	Geography	4	Geographic factors of various topics will be analyzed. Specific topic of field of concentration announced each time course is offered. A maximum of 15 credits is permitted.	GR	LE	Lecture
Spring 2008	GEO599	599	Studies in Selected Subj	GEO	Geography	1	Examination of the influence of selected physical characteristics of the atmosphere in determining the range of vision of remote sensors and the effect of these atmospheric factors on remotely sensed imagery.	GR	LE	Lecture
Spring 2008	GEO612	612	Urban Plan II: Princ	GEO	Geography	4	The role of planning in urban and regional structures and duties and responsibilities of planning commissions are discussed. The process of preparing comprehensive plans is pursued. Study items include population change, the economic base, and employment change. The determinants of future urban structure are evaluated.	GR	LE	Lecture

Spring 2008	GEO613	613	Urban Plan III: Land Use	GEO	Geography	4	Process of preparing comprehensive urban plans. Methods for assessing land-use conditions, housing patterns, and urban deterioration. Students participate in the development of a land-use plan for a selected area.	GR	LE	Lecture
Spring 2008	GEO614	614	Urban Planning Seminar	GEO	Geography	4	Examination of urban plans and planning proposals. Includes future land use plans, community facilities and public utility plans, and traffic and circulation plans. Considers modern theories of planning and the planning and design of new communities.	GR	SE	Seminar
Spring 2008	GEO630	630	Climatology I	GEO	Geography	4	Covers observation, measurement, and analysis of climatic elements/controls, classifications, and relationship to human economic and social activities.	GR	LE	Lecture
Spring 2008	GEO631	631	Meteorology	GEO	Geography	4	Development and application of first principles governing the atmosphere at rest and in motion. Examination of the general circulation. Applied meteorology.	GR	LE	Lecture
Spring 2008	GEO632	632	Climatology II	GEO	Geography	4	Principles of physical and dynamical climatology. Evaluation of local and regional transports and conversions of energy in the earth-atmosphere system.	GR	LE	Lecture

Spring 2008	GEO645	645	Intermed Cartog&Map Inter	GEO	Geography	5	Study and practice of compilation processes for the development of maps and models using remotely sensed data sources. 4 hours lecture, 1 hour lab.	GR	LL	Lecture/Lab Combination
Spring 2008	GEO646	646	Map & Photo Interpretation	GEO	Geography	4	Uses of map and photographic data in close and long range photogrammetry. Emphasis on the full spectrum of photo interpretation as applied to the controlled mapping of terrestrial and marine surfaces.	GR	LE	Lecture
Spring 2008	GEO647	647	Geographic Info Sci Prin	GEO	Geography	5	Principles, structures, and applications of geographic information systems and use of data from topographic, remotely sensed, and photogrammetric sources.	GR	LE	Lecture
Spring 2008	GEO648	648	Adv Geographic Info Sci	GEO	Geography	5	Students apply GIS techniques to solve public/private sector information and development problems. Solutions entail data analysis and forecasting, using ARC/INFO geographic information system methods.	GR	LE	Lecture
Spring 2008	GEO653	653	Location Theory	GEO	Geography	4	Study of theoretical aspects of the location of human activities. Introduction to theories and concepts regarding location and spatial arrangement of economic activities.	GR	LE	Lecture

Spring 2008	GEO655	655	Geo of Transportation	GEO	Geography	4	Analysis of spatial aspects and structural characteristics of transport networks, the movement of goods, and their relationship to regional structures.	GR	LE	Lecture
Spring 2008	GEO658	658	Human Percept in Res Mgt	GEO	Geography	4	A study of the spatial factors influencing human response and decision making in resource use schema. Attention is given to the manner in which man perceives environmental elements and apprehends resources and natural hazards such as floods and droughts.	GR	LE	Lecture
Spring 2008	GEO662	662	Remote Sensing of Envir	GEO	Geography	4	Application of remote sensing techniques to environmental and resource problems. Emphasis on optimizing sensor selection to enhance image information content.	GR	LE	Lecture
Spring 2008	GEO663	663	Geo Appl Rem-Sensed Data	GEO	Geography	4	Application of geographic methodology to problems employing photographic and machine-processed multispectral scanner data that are used in academic research, environmental analysis, and planning.	GR	LE	Lecture
Spring 2008	GEO665	665	Cartography	GEO	Geography	5	Principles of map projections and their construction and use in illustrating geographic relationships. Includes methods of design, compilation, and graphic representation of data. 4 hours lecture, 1 hour lab.	GR	LL	Lecture/Lab Combination

Spring 2008	GEO666	666	Sem in Urban Geography	GEO	Geography	4	A consideration of the geographic perspective in the study of cities. Through review of the literature, recent developments in theory, method, and techniques in urban geographic research are examined, with particular emphasis on the behavioral approach.	GR	LE	Lecture
Spring 2008	GEO670	670	Regional Geography	GEO	Geography	4	Physical and cultural analysis of major and minor world regions. Topics vary.	GR	LE	Lecture
Spring 2008	GEO681	681	Special Problems in Geo	GEO	Geography	1	Research and problems designed for specific needs and talents of the students. Titles vary.	GR	LE	Lecture
Spring 2008	GEO682	682	Special Problems in Geo	GEO	Geography	1	Supervised individual study of special problems or specific regions.	GR	LE	Lecture
Spring 2008	GEO684	684	Biogeography	GEO	Geography	3	Introduction to factors affecting the geographical distribution of plants and animals. Offered jointly with the Department of Biological Sciences. Students registering for GEO 684 for three credits attend lectures only; registration for GEO 684 for four credits requires an additional laboratory section.	GR	LE	Lecture
Spring 2008	GEO685	685	Geographic Methodology	GEO	Geography	5	Examination of the nature, tools, methods and techniques of geographic analysis. Emphasis on design, compilation, interpretation, and presentation of research materials.	GR	LE	Lecture

Spring 2008	GEO789	789	Continuing Registration	GEO	Geography	1		GR	IS	Independent Study
Spring 2008	GER101	101	First Yr German	GER	German	4	Study of the vocabulary and structure of the German language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	GER102	102	First Yr German	GER	German	4	Study of the vocabulary and structure of the German language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	GER103	103	First Yr German	GER	German	4	Study of the vocabulary and structure of the German language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	GER111	111	Essentials of German	GER	German	4	Introduction to German with an emphasis on speaking the language.	UG	LE	Lecture
Spring 2008	GER115	115	German for Read Knowledge	GER	German	4	Introduction to all main points of grammar; practice in recognizing grammatical constructions and using a dictionary; and selected readings of adult-level texts from various fields. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	GER150	150	German Grammar Review	GER	German	4	A thorough review of German grammar with an emphasis on oral practice.	UG	LE	Lecture
Spring 2008	GER201	201	Second Yr German	GER	German	4	Grammar review, reading, and discussion of selected texts with practice speaking and writing the language.	UG	LE	Lecture

Spring 2008	GER202	202	Second Yr German	GER	German	4	Grammar review, reading, and discussion of selected texts with practice speaking and writing the language.	UG	LE	Lecture
Spring 2008	GER203	203	Second Yr German	GER	German	4	Grammar review, reading, and discussion of selected texts with practice speaking and writing the language.	UG	LE	Lecture
Spring 2008	GER215	215	Scientific German	GER	German	4	Intensive reading in all areas of expository and technical German.	UG	LE	Lecture
Spring 2008	GER311	311	German Conversation	GER	German	4	Emphasis on the culture of the German-speaking world.	UG	LE	Lecture
Spring 2008	GER311W	311W	Writing in GER 311	GER	German	0		UG	LB	Lab
Spring 2008	GER312	312	German Conversation	GER	German	4		UG	LE	Lecture
Spring 2008	GER313	313	German Conversation	GER	German	4	Practice in speaking German with emphasis on the culture of the German-speaking world.	UG	LE	Lecture
Spring 2008	GER321	321	German Composition	GER	German	4		UG	LE	Lecture
Spring 2008	GER321W	321W	Writing in German Composition	GER	German	0		UG	LB	Lab
Spring 2008	GER322	322	German Composition	GER	German	4		UG	LE	Lecture
Spring 2008	GER322W	322W	Writing in GER 322	GER	German	0		UG	LB	Lab
Spring 2008	GER325	325	Business German	GER	German	4	An introduction to the language of business german with insight into Germany's place in the global economy.	UG	LE	Lecture

Spring 2008	GER326	326	Business German	GER	German	4	Study of business and culture behind German. Development of communication skills and intercultural understanding. Use of German in international business.	UG	LE	Lecture
Spring 2008	GER326W	326W	Writing in GER 326	GER	German	0		UG	LB	Lab
Spring 2008	GER331	331	Survey of German Lit	GER	German	4	Historical survey of German literature from its beginning to the present. 331: Literature of the Middle Ages, Renaissance, Reformation, Enlightenment, and Storm and Stress. 332: Classicism, Romanticism, Poetic Realism, and Modern Period.	UG	LE	Lecture
Spring 2008	GER331W	331W	Writing in GER 331	GER	German	0		UG	LB	Lab
Spring 2008	GER332	332	Survey of German Lit	GER	German	4	Historical survey of German literature from its beginning to the present. 331: Literature of the Middle Ages, Renaissance, Reformation, Enlightenment, and Storm and Stress. 332: Classicism, Romanticism, Poetic Realism, and Modern Period.	UG	LE	Lecture
Spring 2008	GER332W	332W	Writing in GER 332	GER	German	0		UG	LB	Lab
Spring 2008	GER351	351	German Culture & Civ I	GER	German	4	Survey of cultural influences and of political, social, economic, religious, educational, and cultural institutions.	UG	LE	Lecture
Spring 2008	GER361	361	Intr Germanic Folklore	GER	German	4	Survey of Germanic folklore as it relates to literature.	UG	LE	Lecture

Spring 2008	GER399	399	Studies in Selected Subj	GER	German	1	Problems, approaches, and topics in the field of German. Topics vary.	UG	IS	Independent Study
Spring 2008	GER403	403	Adv Studies: Lang Civiliz	GER	German	4	Topics vary. Conducted in German.	UG	LE	Lecture
Spring 2008	GER403W	403W	Writing in GER 403	GER	German	0		UG	LB	Lab
Spring 2008	GER405	405	Early German Lit	GER	German	4	German literature from the earliest times to the Reformation.	UG	LE	Lecture
Spring 2008	GER406	406	Renaissance & Reformation	GER	German	4	Representative German authors of the period.	UG	LE	Lecture
Spring 2008	GER410	410	Baroque	GER	German	4	Representative German authors of the period.	UG	LE	Lecture
Spring 2008	GER415	415	German Lit 18th Cent	GER	German	4	Representative authors in Rococo, Enlightenment, and Storm and Stress.	UG	LE	Lecture
Spring 2008	GER416	416	German Lit 18th Cent	GER	German	4	Representative works of Goethe and Schiller.	UG	LE	Lecture
Spring 2008	GER417	417	German Romanticism	GER	German	4	Study of the romantic movement with representative works of Schlegel, Novalis, Wackenroder, Tieck, Eichendorff, Hoffmann, and others.	UG	LE	Lecture
Spring 2008	GER418	418	Goethe's Faust	GER	German	4	Intensive study of Faust I and Faust II.	UG	LE	Lecture
Spring 2008	GER425	425	German Lit 19th Cent	GER	German	4	Readings and reports in 19th-century literature. Representative works of Eichendorff, Hoffmann, Keller, Meyer, Storm, Fontane, and others.	UG	LE	Lecture

Spring 2008	GER426	426	German Lit 19th Cent	GER	German	4	Readings and reports in 19th-century drama. Representative works of Tieck, Kleist, Grillparzer, Hebbel, Buchner, and others.	UG	LE	Lecture
Spring 2008	GER427	427	German Lit 19th Cent	GER	German	4	Readings and reports in 19th-century poetry. Representative works of Heine, Droste-Hulshoff, Morike, Dehmel, Liliencron, and others.	UG	LE	Lecture
Spring 2008	GER431	431	German Lit 20th Cent	GER	German	4	Readings and reports in 20th-century prose. Representative works of Hesse, Mann, Kafka, and others.	UG	LE	Lecture
Spring 2008	GER432	432	German Lit 20th Cent	GER	German	4	Readings and reports in 20th-century drama. Representative works of Schnitzler, Hofmannsthal, Kaiser, Toller, Brecht, and others.	UG	LE	Lecture
Spring 2008	GER433	433	German Lit 20th Cent	GER	German	4	Readings and reports in 20th-century poetry. Representative works of Rilke, George, Trakl, Benn, and others.	UG	LE	Lecture
Spring 2008	GER434	434	Thomas Mann	GER	German	4	Studies of the writings of Thomas Mann.	UG	LE	Lecture
Spring 2008	GER442	442	Hst German Lang	GER	German	4		UG	LE	Lecture
Spring 2008	GER450	450	Research	GER	German	1	Topics vary.	UG	IS	Independent Study
Spring 2008	GER481	481	Independent Rdg Adv Stu	GER	German	4	Topics vary. Repeatable for up to 12 hours.	UG	IS	Independent Study
Spring 2008	GER511	511	German Conversation	GER	German	4	Emphasis on the culture of the German-speaking world.	GR	LE	Lecture
Spring 2008	GER512	512	German Conversation	GER	German	4	Emphasis on the culture of the German-speaking world.	GR	LE	Lecture

Spring 2008	GER521	521	German Composition	GER	German	4	Oral and written composition in German; translations from English into German. Further grammar study.	GR	LE	Lecture
Spring 2008	GER522	522	German Composition	GER	German	4	Oral and written composition in German; translations from English into German.	GR	LE	Lecture
Spring 2008	GER523	523	German Composition	GER	German	4	Oral and written composition in German; translation from English into German.	GR	LE	Lecture
Spring 2008	GER525	525	Business German	GER	German	4	An introduction to the language of business with insight into Germany's place in the global economy.	GR	LE	Lecture
Spring 2008	GER526	526	Business German	GER	German	4	An advanced study of the language of business German with insight into Germany's place in the global economy.	GR	LE	Lecture
Spring 2008	GER532	532	Survey of German Lit	GER	German	4	Historical survey of German literature. Classicism, Romanticism, Poetic Realism and Modern Period.	GR	LE	Lecture
Spring 2008	GER551	551	German Culture & Civiliz	GER	German	4	Survey of cultural influences and of political, social, economic, religious, educational and cultural institutions.	GR	LE	Lecture
Spring 2008	GER590	590	Foreign Lang Institute	GER	German	8	For teachers of German. Intensive experience designed, through total immersion, to improve language skills (conversation and composition) and awareness of German civilization and contemporary culture.	GR	LE	Lecture

Spring 2008	GER599	599	Intro to German Lit	GER	German	4	Graduate level treatment of problems, approaches and topics in the field of German. Topics vary.	GR	LE	Lecture
Spring 2008	GER603	603	Language Civilization	GER	German	4	Course content varies. Topic chosen by instructor. Conducted in German.	GR	LE	Lecture
Spring 2008	GER603W	603W	Writing in GER 603	GER	German	0		UG	LB	Lab
Spring 2008	GER616	616	German Lit 18th Cent	GER	German	4	Representative works of Goethe and Schiller.	GR	LE	Lecture
Spring 2008	GER617	617	German Romanticism	GER	German	4	Study of the romantic movement with representative works of Schlegal, Novalis, Wackenroder, Tieck, Eichendorff, Hoffman, and others.	GR	LE	Lecture
Spring 2008	GER625	625	Ger Lit 19th Cent:Prose	GER	German	4	Representative works of Eichendorff, Hoffmann, Keller, Meyer, Storm, Fontane, and others.	GR	LE	Lecture
Spring 2008	GER631	631	Ger Lit 20th Cent: Prose	GER	German	4	Readings and reports in twentieth-century literature. Representative works of Hesse, Mann, Kafka, and others.	GR	LE	Lecture
Spring 2008	GER632	632	Ger Lit 20th Cent: Drama	GER	German	4	Readings and reports in twentieth-century literature. Representative works of Schnitzler, Hofmannsthal, Kaiser, Toller, Brecht, and others.	GR	LE	Lecture
Spring 2008	GER650	650	Ind Grad Research	GER	German	1	Titles vary.	GR	IS	Independent Study
Spring 2008	GER681	681	Ind Read for Grad Student	GER	German	4	Independent reading for graduate students. Repeatable for up to 12 hours.	GR	IS	Independent Study

Spring 2008	GL199W	199W	Writing in GL 199	GL	Geology	0	Required writing component for GL 199.	UG	LB	Lab
Spring 2008	GL253W	253W	Writing in GL 253	GL	Geology	0		UG	LB	Lab
Spring 2008	GL431	431	Elec Methods in Env Geop	GL	Geology	4	The principles and practices of acquisition and interpretation of data from electrical and electromagnetic geophysical techniques.	UG	LE	Lecture
Spring 2008	GL461L	461L	GL Lab	GL	Geology	0		UG	LB	Lab
Spring 2008	GL485W	485W	Writing in GL 485	GL	Geology	0		UG	LB	Lab
Spring 2008	GL599	599	Special Problems	GL	Geology	1	Research and problems designed for specific needs and talents of the students.	GR	IS	Independent Study
Spring 2008	GL604	604	Earth Res & Env Quality	GL	Geology	3	Study of Earth Resources as the economic base of civilization. Natural geologic processes and geochemical cycles of global change are compared with human-induced impact on the environment. Emerging trends in technology and policy matters and their influence on environmental quality are analyzed.	GR	LE	Lecture

Spring 2008	GL605	605	Grns-Water Monitor & Rem	GL	Geology	4	Study of the principles of ground water monitoring and cleanup system design. Theory and field practices for monitoring well drilling/installation, lysimeter installation for natural and contaminated groundwater, etc. Field visits of sites with contaminated aquifers undergoing remediation. Graded pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	GL606	606	Earth Science for Tchrs	GL	Geology	4.5	Sources and forms of energy operating on the earth and the effects of these operations on the origin, history, and evolution of the earth. 3 hours lecture, 3 hours lab.	GR	LE	Lecture
Spring 2008	GL606L	606L	Earth Sci for Teachr Lab	GL	Geology	0	Required laboratory for GL 606.	GR	LB	Lab
Spring 2008	GL607	607	Earth Science by Inquiry	GL	Geology	4.5	The sources and forms of energy operating on the earth and the effects of these operations on the origin, history, and evolution of the earth. 3 hours lecture, 3 hours lab. This course cannot be applied toward the M.S. degree in Geology.	GR	LL	Lecture/Lab Combination

Spring 2008	GL609	609	Gl Hazrd & Envirn Qual	GL	Geology	4	Hazards from geologic materials: reactive minerals, the asbestos controversy, radioactive and toxic gasses. Hazards from geologic processes: earthquakes, volcanic eruptions, slope processes, subsidence, floods, coastal hazards. Geologic hazards monitoring, mitigation, and avoidance. Risk evaluation. 3 hours lecture, 3 hours lab.	GR	LE	Lecture
Spring 2008	GL609L	609L	Environmental GlLab	GL	Geology	0	Required laboratory for GL 609.	GR	LB	Lab
Spring 2008	GL610	610	Oceanography	GL	Geology	4	Fundamentals of oceanography for students with an understanding of scientific principles. The course includes content that is needed by earth science teachers. Students will use the Internet and some basic computer applications.	GR	LE	Lecture
Spring 2008	GL611	611	Structural Geology	GL	Geology	4.5	Geometry of the structural features of rocks, their geographic distribution, and possible causes. 3 hours lecture, 3 hours lab.	GR	LE	Lecture
Spring 2008	GL611L	611L	Structural Geology Lab	GL	Geology	0	Required laboratory for GL 611.	GR	LB	Lab

Spring 2008	GL615	615	Global Change for Tchrs	GL	Geology	4.5	Analysis of the impact of geologic phenomena (earthquakes, volcanoes, sea-level changes etc.) on the earth's atmosphere, lithosphere, biosphere, and hydrosphere; development of classroom applications in earth system science.	GR	LE	Lecture
Spring 2008	GL618	618	Water and the Environment	GL	Geology	3	Study the distribution and quantity of fresh water on Earth, the chemical and physical processes that affect the movement and quality of natural water, and the impact of human activities on water resources.	GR	LE	Lecture
Spring 2008	GL620	620	Regional Tectonics	GL	Geology	3	Study of the structure of the Earth as revealed by solid earth geophysics and dynamics of internal geologic processes, and of the large-scale tectonic structure of the North American continent obtained through the Decade of North American Geology Project.	GR	LE	Lecture
Spring 2008	GL622	622	Intr Applied Geophysics	GL	Geology	5	Introduction to gravity, magnetic, seismic, and electrical methods of subsurface investigation.	GR	LE	Lecture
Spring 2008	GL622L	622L	Intr Appl Geophysics Lab	GL	Geology	0	Required laboratory for GL 622.	GR	LB	Lab

Spring 2008	GL623	623	Seismic Methods	GL	Geology	4	Theory, observation, and analysis of seismic phenomena as applied to geologic exploration. 2 hours lecture, 4 hours lab.	GR	LE	Lecture
Spring 2008	GL623L	623L	Seismic Methods Lab	GL	Geology	0	Required laboratory for GL 623.	GR	LB	Lab
Spring 2008	GL625	625	Topical Conc Geophysics	GL	Geology	4	Special topics in geophysics. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	GL625L	625L	Top Conc Geophysics Lab	GL	Geology	0	Required laboratory for GL 625.	GR	LB	Lab
Spring 2008	GL626	626	Geophysics Seminar	GL	Geology	1	Literature survey and student presentations on selected topics in geophysics. Graded pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	GL628	628	Geology Colloquium	GL	Geology	0.5	Selected geological topics discussed by students, guest speakers, and faculty. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	GL631	631	Elec Methods in Env Geop	GL	Geology	4	The principles and practices of acquisition and interpretation of data from electrical and electromagnetic geophysical techniques.	GR	LE	Lecture
Spring 2008	GL632	632	Sed Syst & Seq:Carbonates	GL	Geology	4.5	Interpretation of ancient and modern carbonate systems using sequence stratigraphic principles. Carbonate facies models as predictive tools for hydrocarbon exploration and aquifer modeling. Composition, origin, and diagenesis of carbonate rocks.	GR	LE	Lecture
Spring 2008	GL632L	632L	Carb Sedim & Petrol Lab	GL	Geology	0	Required laboratory for GL 632.	GR	LB	Lab

Spring 2008	GL633	633	Geophys Field Research	GL	Geology	1	Geophysical research participation in a project of the department. Content and techniques will depend on the particular project, but will normally have an extensive component of field data acquisition. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	GL634	634	Field Geology	GL	Geology	9	Geologic phenomena illustrated in the field. Introduction of mapping techniques and the application of many geologic disciplines to geologic analysis.	GR	LE	Lecture
Spring 2008	GL634L	634L	Field Geology Lab	GL	Geology	0	Required laboratory for GL 634.	GR	LB	Lab
Spring 2008	GL636	636	Diagenesis of Sed Rocks	GL	Geology	3	Theory and application of petrographic techniques to studies of carbonate and clastic rocks, with emphasis on diagenesis and porosity development. 2 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	GL636L	636L	Diagen Sed Rocks Lab	GL	Geology	0	Required laboratory for GL 636.	GR	LB	Lab
Spring 2008	GL637	637	Subsurf Dig Imag & Proces	GL	Geology	4	Digital processing and visualization of seismic reflection and ground penetrating radar data. 2 hours lecture, 4 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	GL638	638	Seismic Interpretation	GL	Geology	3	Interpretation methods for seismic reflection data are studied with emphasis on structural and stratigraphic interpretation for petroleum traps.	GR	LE	Lecture

Spring 2008	GL638L	638L	Seismic Interpret Lab	GL	Geology	0	Required laboratory for GL 638.	GR	LB	Lab
Spring 2008	GL644	644	Formation Analysis	GL	Geology	4	Theory, application, and interpretation of geophysical logs with emphasis on their use in correlation and determining porosity, permeability, and fluid content of subsurface formations. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	GL646	646	Sequence Stratigraphy	GL	Geology	3	Provides a firm grounding in: the mechanisms that produce sea-level change, how sediments respond to these changes, and how the architecture of basins develop over time.	GR	LE	Lecture
Spring 2008	GL650	650	Hydrogeology	GL	Geology	4	Provides a fundamental understanding of basic hydrological principles including ground water flow and chemistry, surface water hydrology, unsaturated flow, and meteorology.	GR	LE	Lecture
Spring 2008	GL654	654	Grnd Water Flw and Trans	GL	Geology	4	Covers the occurrence and movement of ground water, and the advection and dispersion of contaminants in ground water flow regimes. Lab introduces interpreting the hydraulic properties of ground water flow regimes from field data. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination

Spring 2008	GL655	655	Hydrogeochemistry	GL	Geology	4	Lectures focus on the chemical interactions between natural waters and their geologic environments. Included are chemical principles, carbonate system, silicate equilibria and weathering, and redox reactions. Isotope hydrology and hydrochemical modeling are also introduced. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	GL661	661	Geol/Environ App of GIS	GL	Geology	4	Study the concepts, terminology, data models, and basic analytical functions of geographic information system and its applications to solving environmental and geologic problems. ArcGIS is used for hands-on exercises and a class project.	GR	LE	Lecture
Spring 2008	GL662	662	Process Geomorphology	GL	Geology	4	Study of the processes that create and modify landforms; classification of landforms and what they reveal of past geologic processes and climates.	GR	LE	Lecture
Spring 2008	GL663	663	Gl/Env Applic of Remote Sens	GL	Geology	4	The use of aerial photographs, satellite and radar images for geological mapping, exploration of mineral resources, hydrogeology, hazard monitoring, environmental problems, and land use monitoring and analysis.	GR	LE	Lecture

Spring 2008	GL668	668	Ground Water Contamination	GL	Geology	4	Study of organic and inorganic pollutants in the groundwater. Behavior of organic pollutants in vadoze zone and saturated subsurface: vapor migration, dissolution, and sorption of LNAPL and DNAPL constituents. Chemical microbiological degradation, and fate of chlorinated and other hydrocarbons.	GR	LE	Lecture
Spring 2008	GL669	669	Site Remediation	GL	Geology	3	Study of chemical and microbiological degradation of pollutants in the subsurface. Diagnosis and assessment of contaminated sites. Concepts and techniques for LNAPL and DNAPL remediation: pump-and-treat, soil vapor extraction, bioventing/airsparging, chemical treatment, solvent extraction, and bioremediation.	GR	LE	Lecture
Spring 2008	GL670	670	Environment Geochemistry	GL	Geology	4	Introduction to environmental organic pollutants. Concepts in behavior of pollutants: vapor pressure, solubility, air-water and solvent-water, partitioning, and sorption to solids. Chemical and microbial degradation of organic pollutants. Modeling concepts.	GR	LE	Lecture

Spring 2008	GL681	681	Mineral & Crystallography	GL	Geology	6	Study of crystal properties and crystal classes including approximately 100 important minerals. Laboratory includes stereoscopic and gnomic projections to identify crystal forms; physical properties to identify minerals in hand sample. 3 hours lecture, 6 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	GL683	683	Sedimetnary Petrology	GL	Geology	4.5	Introduction to the optical properties of common minerals. Survey of sedimentary rocks in hand specimen, thin section, and field occurrence. 3 hours lecture, 3 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	GL684	684	Igneous & Metamor Petrol	GL	Geology	4.5	Study the origin of igneous and metamorphic rocks. Thin sections and hand specimens are used in the laboratory for mineral identification, rock structures, and classification. 3 hours lecture, 3 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	GL685	685	Stratigraphy	GL	Geology	4.5	Principles, rules, and techniques of correlation. Relationships between surface and subsurface correlation. Geologic and geophysical correlation techniques are emphasized in the laboratory. 3 hours lecture, 3 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	GL686	686	Invertebrate Paleontology	GL	Geology	4.5	Morphology, geologic record, and geographic distribution of major invertebrate groups characterized by significant fossil representation. 3 hours lecture, 3 hours lab.	GR	LL	Lecture/Lab Combination

Spring 2008	GL687	687	Sedimentology	GL	Geology	4	Clastic rocks, their mineralogy, texture, provenance, and classification; nonclastic carbonates and other nonclastic rocks; and depositional environments and sedimentary structures. 3 hours lecture, 2 hours lab. Completion of an undergraduate course in stratigraphy is required.	GR	LL	Lecture/Lab Combination
Spring 2008	GL699	699	Special Problems	GL	Geology	0.5	Research and problems designed for specific needs and talents of the students. May be taken for a letter grade or pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	GL699	699	Special Problems	GL	Geology	0.5	Research and problems designed for specific needs and talents of the students. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	GL700	700	Prin Instruction Geology	GL	Geology	1	A survey of available instructional materials and discussion of educational theory and techniques leading to more effective instruction. For graduate teaching assistants only.	GR	LE	Lecture
Spring 2008	GL712	712	Advanced Hydrogeochemistry	GL	Geology	4	Case studies of hydrogeochemistry in regional aquifer systems and current topics of interest, such as organic geochemistry of natural and contaminated waters, acidic mine water, wetland geochemistry, and hydrogeochemistry of non-point source pollutants.	GR	LE	Lecture

Spring 2008	GL720	720	Isotope Hydrology	GL	Geology	3.5	Theories and applications of environmental isotopes to hydrologic studies. Both stable isotopes (oxygen, hydrogen, carbon, strontium, nitrogen, sulfur) and radioactive nuclides (H-3, C-14, Cl-36) will be discussed.	GR	LE	Lecture
Spring 2008	GL748	748	Aquifer Test Analysis Lab	GL	Geology	2	This laboratory provides hands-on experience in analyzing and interpreting data from aquifer tests. Case-study data sets are used that come from confined, unconfined, fractured, bounded, leaking, and partially penetrated formations. Constant rate, variable rate, and slug tests are covered. May be taken for letter grade or pass/unsatisfactory.	GR	LB	Lab
Spring 2008	GL749	749	Adv Grnd Water Flow Trans	GL	Geology	3	Second-level course in subsurface fluid flow, providing the theoretical background necessary to solve problems involving ground water flow, well hydraulics, aquifer characterization, and contaminant transport.	GR	LE	Lecture

Spring 2008	GL750	750	Numerical Analy Geology	GL	Geology	4.5	Use of numerical modeling methods, including finite differences and finite elements in solving problems related to ground water flow and mass transport. Emphasis is on the theory including development of well-posed boundary-value problems, development of the numerical scheme, and choice of solution algorithms. Students write explicit and implicit finite difference codes, as well as a finite element code to solve two-dimensional flow problems.	GR	LE	Lecture
Spring 2008	GL751	751	Grondwater Flow Modeling	GL	Geology	3	The first half of the course introduces the techniques used in constructing and applying mathematical models of ground water flow. The second half features the use of the USGS 3-D flow model. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	GL754	754	Hydrogeochemical Modeling	GL	Geology	4	Introduces students to several computer programs that have been developed to aid in the understanding of ground water geochemistry. Includes programs for mass balancing, speciation, and ground water simulation. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination

Spring 2008	GL780	780	MST Project Development	GL	Geology	2	This seminar-style course introduces students to different project options, discussion of project formats, and development of individual research proposals.	GR	LE	Lecture
Spring 2008	GL781	781	MST Project	GL	Geology	1	Students will develop a project combining elements of both education and science. Projects are expected to have a significant impact on some aspect of teaching and learning.	GR	LE	Lecture
Spring 2008	GL789	789	Continuing Registration	GL	Geology	1		GR	LE	Lecture
Spring 2008	GL799	799	Special Problems	GL	Geology	1	Titles vary. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	GL898	898	Geologic Field Research	GL	Geology	3	Specific areas in a region are studied using a specific area of specialization in the geologic sciences. Data are collected under close supervision and analyzed independently. Formal report of results to be prepared. Field experience included.	GR	IS	Independent Study
Spring 2008	GL899	899	Thesis	GL	Geology	1		GR	IS	Independent Study
Spring 2008	GR101	101	Beginning Greek	GR	Greek	4	Essentials of the Greek language.	UG	LE	Lecture
Spring 2008	GR102	102	Beginning Greek	GR	Greek	4	Essentials of the Greek language.	UG	LE	Lecture
Spring 2008	GR103	103	Beginning Greek	GR	Greek	4	Essentials of Greek language.	UG	LE	Lecture
Spring 2008	GR201	201	Intermediate Greek	GR	Greek	4	Review of essentials and reading for comprehension in selected authors.	UG	LE	Lecture

Spring 2008	GR202	202	Intermediate Greek	GR	Greek	4	Review of essentials and reading for comprehension in selected authors.	UG	LE	Lecture
Spring 2008	GR351	351	Readings in Greek Drama	GR	Greek	4	Aeschylus, Sophocles, Euripides, Aristophanes, and Menander. Study of at least one play in Greek. Topics include origin and development of tragedy, drama as a reflection of contemporary events, and development of new comedy.	UG	LE	Lecture
Spring 2008	GR353	353	Readings in Greek Poetry	GR	Greek	4	Greek epic and lyric poetry: epics of Homer and Hesiod, the Homeric Hymns, the early lyric poets such as Archilochus and Sappho, and the Hellenistic poets. Topics for investigation include structure and technique of oral epic, the didactic tradition, lyric meters and diction, and the development of pastoral poetry.	UG	LE	Lecture
Spring 2008	GR399	399	Studies Selected Subjects	GR	Greek	1	Problems, approaches, and topics in the field of Greek. Topics vary.	UG	LE	Lecture
Spring 2008	GR451	451	Readings Greek Philosophy	GR	Greek	4	Plato, Aristotle, Epicurus, Epictetus, and Marcus Aurelius. Topics include pre-Socratics and the development of philosophical vocabulary, the sophistic movement, the Cynic tradition, and the development of popular philosophy. Titles vary.	UG	LE	Lecture

Spring 2008	GR453	453	Read in Gr Hst & Biography	GR	Greek	4	Herodotus, Thucydides, Xenophon, Polybius, and Plutarch. Topics for investigation include methods of composition, influences on historiography from the sophists and philosophers, the development of Greek historical writing, and supplemental evidence from inscriptions and nonliterary sources. Titles vary.	UG	LE	Lecture
Spring 2008	GR455	455	Read Gr Politics Theory	GR	Greek	4	Lysias, Demosthenes, Isocrates, Old Oligarch, Plato, Xenophon, and Aristotle. Topics for investigation include development of political ideas and vocabulary, nonliterary sources for our knowledge of Greek civil life, and influences on Roman theories and practices.	UG	LE	Lecture
Spring 2008	GR457	457	Read Gr Prose Narrative	GR	Greek	4	Readings of Greek prose authors on topics such as the scientific or pseudoscientific writings of Hippocrates, Euclid, Archimedes, and Ptolemy; travel commentary of Strabo and Pausanias; essays of Athenaeus; and fiction of Lucian.	UG	LE	Lecture
Spring 2008	GR481	481	Independent Reading	GR	Greek	1	Topics vary.	UG	IS	Independent Study

Spring 2008	HEB100	100	Essentials of Hebrew	HEB	Hebrew	3	An introduction to the essential elements of the Hebrew Language, emphasizing skills needed to read and understand Biblical Hebrew. The relationship between Biblical and Modern Hebrew will also be explored.	UG	LE	Lecture
Spring 2008	HED230	230	Personal Health	HED	Health Education	4	Discussions of personal health problems in adolescents through the lifespan including the six CDC risk areas of injuries, tobacco, alcohol, drug use, sexual behavior that leads to pregnancy, STDs, diet, and physical activity.	UG	LE	Lecture
Spring 2008	HED231	231	Community Health	HED	Health Education	4	This course addresses the population-based aspects of health. Topics include epidemiology, assessing need, environmental and consumer health, at-risk populations and community-based agencies.	UG	LE	Lecture
Spring 2008	HED331	331	Health: Ece/Midch	HED	Health Education	4	Covers students pre-K through ninth grade. Promoting positive lifestyles; the comprehensive school health program; planning, organizing, and evaluation of curriculum; goals and objectives for health teaching; teaching and learning plans; and controversial issues.	UG	LE	Lecture

Spring 2008	HED332	332	Diverse Needs in Health	HED	Health Education	4	This course addresses the diverse needs of students related to health status and health education. Topics include diabetes, asthma, grief, sexuality in individuals with disabilities, ESL, reading, and individualized education plans.	UG	LE	Lecture
Spring 2008	HED333	333	Human Sexuality for Educators	HED	Health Education	4	This course develops a depth of sexuality knowledge and related teaching competenices of K-12 teachers. Emphasis is placed on adolescent and young adult sexuality and application of the National Health Education Standards.	UG	LE	Lecture
Spring 2008	HED334	334	Health Behaviors	HED	Health Education	4	This course addresses the theories of health behavior and health behavior change. Students develop a theory-based logic map for one risk behavior.	UG	LE	Lecture
Spring 2008	HED335	335	Health Communications	HED	Health Education	4	This course addresses step-by-step design, implementation, evaluation, and critique of communication programs designed to change health behavior. Students develop a theory-based health communications plan with communications products.	UG	LE	Lecture

Spring 2008	HED385	385	Foundation Teach Health I	HED	Health Education	4	This course introduces students to health education pedagogy, with an emphasis on the Centers for Disease Control and Prevention priority content areas, the National Health Education Standards, and the Coordinated School Health Program Model.	UG	LE	Lecture
Spring 2008	HED430	430	Hlth Promotion Planning	HED	Health Education	4	Students develop a depth of health education knowledge and skills for planning, implementing and evaluating school and community health education programs.	UG	LE	Lecture
Spring 2008	HED430W	430W	Writing in HED 430	HED	Health Education	0	Required writing component for HED 430.	UG	LB	Lab
Spring 2008	HED432	432	Death, Loss and Grief	HED	Health Education	3	(Also listed as RHB 432.) Course in death, dying, and grieving for health educators who deal with grief and loss in situations such as death, dying, survivorship, children and loss, second marriages, suicide, and other events of trauma. (Previously listed as HPR 432.)	UG	LE	Lecture
Spring 2008	HED485	485	Foundation Teach Hlth II	HED	Health Education	4	This culminating experience has students apply health education pedagogical skills through the development of a comprehensive health education unit and resource plan.	UG	LE	Lecture

Spring 2008	HED770	770	Social Behavior Health	HED	Health Education	4	This course addresses the social-ecological and behavioral determinants of health status and the role of theory-based interventions in alerting health behavior and status.	GR	LE	Lecture
Spring 2008	HED775	775	Application Research HPR	HED	Health Education	4	his seminar course addresses the public health priorities for the nation and current health promotion initiatives to alter health behaviors, health status and health disparaties.	GR	LE	Lecture
Spring 2008	HFE501	501	Stats for Dev & Manuf I	HFE	Human Factors Engineering	4	Presentation of statistical techniques as applied to engineering testing, development, and manufacturing. Introduces and applies probability distributions, measures of association, inferences on responses, and basic experimental design. Emphasis is on application of statistical tools.	GR	LE	Lecture
Spring 2008	HFE502	502	Stats for Dev & Manuf II	HFE	Human Factors Engineering	4	A continuation of HFE 501. Focuses on analysis techniques for multiple variables, including ANOVA and multiple regression, as applied to engineering testing, development, and manufacturing. Process analysis and improvement techniques presented, along with tools for reliability analysis.	GR	LE	Lecture

Spring 2008	HFE506	506	Hum Factrs in Egr & Des	HFE	Human Factors Engineering	4	(Also listed as PSY 502.) Introduction to the study of human factors in the design and operation of machine systems.	GR	LE	Lecture
Spring 2008	HFE601	601	Egr Academic Integrity	HFE	Human Factors Engineering	1	Introduce new engineering graduate students to ethics of engineering, scientific research, and technical writing. Additional topics include active reading, active listening, effective presentation, faculty-advisor relationships and the thesis/dissertation process.	GR	LE	Lecture
Spring 2008	HFE602	602	Prob for Engineers	HFE	Human Factors Engineering	4	Presentation of probability concepts and techniques as applied to engineering applications. Introduces and applies probability distributions, measures of association, inferences on responses, and basic experimental design. Emphasis is on application of statistical tools.	GR	LE	Lecture
Spring 2008	HFE603	603	Statistics for Engineers	HFE	Human Factors Engineering	4	Focus on analysis techniques for multiple variables, including ANOVA and multiple regression, as applied to engineering testing, development, and manufacturing. Process analysis and improvement techniques presented, long with tools for reliability analysis.	GR	LE	Lecture

Spring 2008	HFE605	605	I&E Seminar Series	HFE	Human Factors Engineering	1	Seminars meet once a week. Guest lecturers from high-tech companies provide insight on entrepreneurship and innovation. Students gain an understanding of the associated challenges, as well as the resources available within the community.	GR	SE	Seminar
Spring 2008	HFE606	606	Human Factors Engineering	HFE	Human Factors Engineering	4	Fundamentals of human factors engineering tools and processes as applied to systems development. Emphasis is placed on user-centered design principles. Material is presented through lectures and application-oriented projects.	GR	LE	Lecture
Spring 2008	HFE607	607	Industrials Ergonomics	HFE	Human Factors Engineering	4	Introduces students to the application of ergonomic principles to the industrial environment. Includes subject matter on ergonomic planning and implementation, the work environment, NIOSHA work factors, and workstation and equipment design.	GR	LE	Lecture
Spring 2008	HFE631	631	HFE of Visual Displays	HFE	Human Factors Engineering	4	Introduction to the design of visual display systems. Topics include radiometry and phometry, visual perception, linear systems analysis, color displays, colorimetry 3D displays, standards guidelines.	GR	LE	Lecture
Spring 2008	HFE650	650	Human Factors Analysis	HFE	Human Factors Engineering	3	Covers a variety of engineering and behavioral analytic techniques critical to the study of work performance.	GR	LE	Lecture

Spring 2008	HFE650L	650L	Human Fact Analysis Lab	HFE	Human Factors Engineering	0	Required laboratory for HFE 650.	GR	LB	Lab
Spring 2008	HFE651	651	HFE in Computer Dsgn	HFE	Human Factors Engineering	4	Theoretical paradigms in human-computer interaction and their application to interface design are examined. Emphasis is placed on advanced interface technologies such as multimodel input/output, hypertext, and knowledge-based systems.	GR	LE	Lecture
Spring 2008	HFE651L	651L	HFE in Comput Dsgn Lab	HFE	Human Factors Engineering	0	Required laboratory for HFE 651.	GR	LB	Lab
Spring 2008	HFE665	665	Interactive Sys Modeling	HFE	Human Factors Engineering	4	(Also listed as CEG 665.) Provides students with experience in interactive real-time simulation and design, implementation, and evaluation of interfaces to simulations. The relevant topics are explored through application in supervisory control of complex, dynamic systems.	GR	LE	Lecture

Spring 2008	HFE670	670	Det Oper Research Models	HFE	Human Factors Engineering	4	Introductory course of Deterministic Models in Operations Research and their Applications in Industrial and Systems Engineering. Students will formulate appropriate models, and obtain and interpret analytical results in the context of ISE problems.	GR	LE	Lecture
Spring 2008	HFE671	671	Sys Performance Modeling	HFE	Human Factors Engineering	4	Studies quantitative techniques to analyze and predict systems performance. Topics include queuing models, system simulation, model validation, data collection, quantitative analysis of system performance, and system design evaluation.	GR	LE	Lecture
Spring 2008	HFE676	676	Aerospace Human Factors	HFE	Human Factors Engineering	4	Application of human factors engineering concepts to aerospace systems design. Develops human factors engineering influence on aerospace system dynamics, structure, and control as well as impact on reliability and maintainability.	GR	LE	Lecture

Spring 2008	HFE677	677	Systems Process Analysis	HFE	Human Factors Engineering	4	Explores engineering management practices including basic problem formulation, process analysis, and system improvement using modern software application programs for flow charting, process mapping, activity modeling, critical path analysis, and program evaluation review techniques.	GR	LE	Lecture
Spring 2008	HFE678	678	Comp Models for ISE	HFE	Human Factors Engineering	4	Design and implement data structures and algorithms to create ISE-focused applications using object oriented methods. Applications of linear programming, discrete event simulation and operations research methods in decision support roles.	GR	LE	Lecture
Spring 2008	HFE680	680	Egr in Occup Sfty & Hlth	HFE	Human Factors Engineering	4	Discusses and demonstrates the role and responsibility of engineers in occupational safety and health related issues. Focuses on the application of human factors engineering design principles as a proactive approach for controlling occupational injuries.	GR	LE	Lecture

Spring 2008	HFE681	681	Engineering Economy	HFE	Human Factors Engineering	4	Introduction to analytical methods and techniques for optimizing the economic outcome of technical and managerial decisions. Topics include economic decision criteria, discounted cash flow, risk, depreciation, break-even analysis and tax considerations.	GR	LE	Lecture
Spring 2008	HFE682	682	Oper & Facilities Design	HFE	Human Factors Engineering	4	Provides a fundamental understanding of techniques for the layout and organization of operations in modern production and service facilities.	GR	LE	Lecture
Spring 2008	HFE683	683	Integ Sys for Manufact	HFE	Human Factors Engineering	4	Explores industrial engineering concepts and quantitative techniques as it applies to manufacturing planning and control systems. Discusses production and service industries as well as supply chain systems.	GR	LE	Lecture
Spring 2008	HFE684	684	Prob Methods in OR	HFE	Human Factors Engineering	4	Provide an in-depth coverage of theory and methods to the analysis and design of probalistic systems. Topics include conditional probability, markov chains, and queuing theory.	GR	LE	Lecture

Spring 2008	HFE685	685	Six Sigma for Engineers	HFE	Human Factors Engineering	4	The course introduces students to the practical application of Six Sigma tools in the manufacturing and service projects. The course also includes video tapes and case studies or real world industrial operations.	GR	LE	Lecture
Spring 2008	HFE690	690	Tech Based Ventures	HFE	Human Factors Engineering	4	Train students on methods to develop breakthrough products with an entrepreneurial perspective and managerial outlook. Topics include advanced product development, protecting intellectual property, fostering strategic and creative thinking, effectively leading technology-driven teams.	GR	LE	Lecture
Spring 2008	HFE699	699	Special Problems in HFE	HFE	Human Factors Engineering	1	Topics vary.	GR	LE	Lecture
Spring 2008	HFE707	707	Applications of OR/IE	HFE	Human Factors Engineering	4	This course exposes students to various applications of industrial engineering techniques such as forecasting, optimization, simulation, inventory control, etc. It helps students to identify practical problems and a deeper understanding of these solution techniques.	GR	LE	Lecture

Spring 2008	HFE709	709	Integer Programming	HFE	Human Factors Engineering	4	This course is to present theory and algorithm to solve integer programs and their applications in industry. Applications will be drawn from diverse areas and state of the art optimization software will be used.	GR	LE	Lecture
Spring 2008	HFE710	710	Ergonomic Engineering	HFE	Human Factors Engineering	4	Advanced applications from a variety of bioengineering subfields are identified and defined with respect to their importance in he practice of human factors engineering.	GR	LE	Lecture
Spring 2008	HFE711	711	Ergonomic Engineering	HFE	Human Factors Engineering	4	Advanced applications from a variety of bioengineering subfields are identified and defined with respect to their importance in the practice of human factors engineering.	GR	LE	Lecture
Spring 2008	HFE712	712	Manual Control	HFE	Human Factors Engineering	4	Description of human control processes and their models. Analysis of human skills and skill typology.	GR	LE	Lecture
Spring 2008	HFE723	723	Aero Med Human Factors	HFE	Human Factors Engineering	3	Focuses on recent developments in human factors engineering. Design principles, crew compartment technology and resource management, crew member performance, and reliability are discussed.	GR	SE	Seminar

Spring 2008	HFE724	724	Adv Aerospace Sys Design	HFE	Human Factors Engineering	3	(Also listed as BMS 953.) Qualifies students to make significant human factors contributions to the design of state-of-the-art aerodynamic and space systems. Emphasizes the design of control-display integration, cockpit configuration, maintainability, and reliability.	GR	LE	Lecture
Spring 2008	HFE725	725	Quant Wrkload Analysis	HFE	Human Factors Engineering	4	Physiological and mathematical methods needed to accomplish a workload analysis as a requisite to a system design or a redesign of an ergonomic system.	GR	LE	Lecture
Spring 2008	HFE726	726	HFE Crew Station Design	HFE	Human Factors Engineering	3	(Also listed as BMS 955.) In-depth treatment of human factors engineering principles applicable to design of crew command centers for aerodynamic, space, and maritime systems.	GR	LE	Lecture
Spring 2008	HFE730	730	Heuristic Optimization	HFE	Human Factors Engineering	4	A course in advanced (non-traditional) optimization modeling techniques. Topics include biologically-inspired approaches, agent-based approaches, simulation and optimization and classical heurisitic optimization methods.	GR	LE	Lecture

Spring 2008	HFE731	731	Visual Display Design	HFE	Human Factors Engineering	4	Application of human factors engineering principles to the design of visual display systems. Discusses current display technologies, human vision, design of display parameters, and image quality metrics.	GR	LE	Lecture
Spring 2008	HFE733	733	Advanced Topics in HCI	HFE	Human Factors Engineering	3	Seminar exposing students to theoretical and research issues associated with human-computer interaction (HCI) and cognitive-oriented work from a human factors engineering standpoint. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	HFE734	734	Exp Resrch & Eval in HFE	HFE	Human Factors Engineering	4	Reviews issues related to designing, conducting, and analyzing experiments. Topics include experimental design, experimental ethics, evaluating statistical results, and writing research papers. Students are required to conduct and analyze an experiment.	GR	LE	Lecture
Spring 2008	HFE735	735	Adv Systems Models	HFE	Human Factors Engineering	4	Studies quantitative means of modeling, analyzing, and predicting the performance of human-machine systems. Topics include control theory, estimation theory, fuzzy set theory, information theory, and knowledge-based systems.	GR	LE	Lecture

Spring 2008	HFE742	742	Human Decision Making	HFE	Human Factors Engineering	4	Introduction to the methods, concepts, models and results of the science of decision-making and human-centered design. Prescriptive and descriptive theories of human decision making are discussed and contrasted. Approaches to aiding human decision making are considered in the context of these theoretical frameworks. Applications-oriented issues are emphasized.	GR	LE	Lecture
Spring 2008	HFE743	743	Human Factors Rehab Egr	HFE	Human Factors Engineering	3	(Also listed as BMS 963.) Teaches the application of human factors design concepts for designing aids for the physically handicapped. In addition to manipulation and locomotion aids, barrier-free designs are emphasized.	GR	LE	Lecture
Spring 2008	HFE744	744	Kaizen/Lean Manufact Egr	HFE	Human Factors Engineering	4	The course introduces students to the practical application of Lean manufacturing and Kaizen techniques in the manufacturing environment. It also includes case studies and team projects of real world problems and solutions.	GR	LE	Lecture

Spring 2008	HFE745	745	Adv Ind Ergonomics	HFE	Human Factors Engineering	4	Design of workstations and hand-tools using Physiology and Biomechanics approach. Ergonomic analysis of assembly, machining and manual material handeling operations. Practical solutions and real world case studies to improve productivity and reduce Workers Compensation costs.	GR	LE	Lecture
Spring 2008	HFE749	749	Ergonomic Biodynamics	HFE	Human Factors Engineering	4	Covers quantitative assessment of human motions. Mathematical descriptions include anthropometry, kinematics, kinetics, and dynamics. The methods of kinesiology, biomechanical modeling, and electromyography are emphasized.	GR	LE	Lecture
Spring 2008	HFE751	751	Human & Tech Aspects Coll	HFE	Human Factors Engineering	4	Explores the global revolution in human interconnectedness. Exposes students to the theoretical and research issues in collaboration including how people collaborate in environments with a high degree of decentralized computation, communication and decision-making.	GR	LE	Lecture

Spring 2008	HFE753	753	Quant Meth for Cog Model	HFE	Human Factors Engineering	4	Explores the global revolution in human interconnectedness. Exposes students to the theoretical and research issues in collaboration including how people collaborate in environments with a high degree of decentralized computation, communication and decision-making.	GR	LE	Lecture
Spring 2008	HFE760	760	HFE in Virtual Reality	HFE	Human Factors Engineering	4	Introduction to engineered systems associated with virtual reality. Human factors engineering introduction to engineering details underlying the development of virtual environmental displays.	GR	LE	Lecture
Spring 2008	HFE765	765	Egr Health Systems	HFE	Human Factors Engineering	4	This course is a seminar course that introduces issues in the design of health systems. Example topics include human error, team issues, medical device design, human factors techniques for analyzing health systems, etc.	GR	SE	Seminar
Spring 2008	HFE780	780	Occup Cum Trauma Disord	HFE	Human Factors Engineering	3	Provides and discusses background knowledge and current issues on cumulative trauma disorders, including epidemiological statistics, pathology, risk factors, analysis methods, control measures, and surveillance tools. Students welcomed to bring real worksite cases for discussion.	GR	LE	Lecture

Spring 2008	HFE789	789	Continuing Registration	HFE	Human Factors Engineering	1	May be taken for letter grade or pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	HFE880	880	Selected Topics in HFE	HFE	Human Factors Engineering	1	Selected topics in current research and recent developments in Human Factors Engineering.	GR	LE	Lecture
Spring 2008	HFE890	890	Spec Prob in HFE	HFE	Human Factors Engineering	1	Topics vary.	GR	LE	Lecture
Spring 2008	HFE898	898	PhD Dissertation Research	HFE	Human Factors Engineering	1	Research on Ph.D. dissertation topic. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	HFE899	899	HFE Thesis	HFE	Human Factors Engineering	1	Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	HLT201	201	Human Expressions of Health	HLT	Health	4	An introduction to the aesthetic expressions of health reflecting cultural and spiritual concerns.	UG	LE	Lecture
Spring 2008	HLT202	202	Eastern Influences-West Health	HLT	Health	4	An exploration of the cultures of the Eastern world and their influence on health care practices in the west.	UG	LE	Lecture
Spring 2008	HLT203	203	The Languages of Health Data	HLT	Health	4	An introduction to the mathematical, social, political, financial, and cultural influences on communication regarding health.	UG	LE	Lecture
Spring 2008	HLT416	416	Special Topics in Health	HLT	Health	1	Topics vary. Specific titles announced in quarterly class schedule. May be taken for a letter grade or pass/unsatisfactory.	UG	LE	Lecture

Spring 2008	HLT616	616	Special Topics in Health	HLT	Health	1	Topics vary. Specific titles announced in quarterly class schedule.	GR	LE	Lecture
Spring 2008	HLT617	617	Special Topics-School Nursing	HLT	Health	0.5	This course will offer school nurses and other health professionals the opportunity to update their knowledge and skills related to school health.	GR	LE	Lecture
Spring 2008	HPR100	100	P E: Beginning (Sport)	HPR	Health Phy Educ & Recreation	1	Fundamental skills and knowledge of one particular activity. Competency-based approach. Includes courses for disabled students. Students should check competency levels posted in physical education building before enrolling.	UG	LB	Lab
Spring 2008	HPR101	101	Physical Ed: Intermediate	HPR	Health Phy Educ & Recreation	2	Intermediate level of skills and knowledge in one particular activity. Competency-based approach. Students should check competency levels posted in physical education building before enrolling.	UG	LB	Lab
Spring 2008	HPR102	102	Physical Education: Advanced	HPR	Health Phy Educ & Recreation	3	Advanced level of skills and knowledge in one particular activity. Competency-based approach. Includes courses in life saving and water safety instruction. Students should check competency levels in Physical Education office.	UG	LB	Lab

Spring 2008	HPR200	200	Teaching (Sport)	HPR	Health Phy Educ & Recreation	1	Develop methods of teaching fundamental skills and knowledge of a particular sports activity. Emphasizes a variety of teaching skills and classroom management techniques.	UG	LL	Lecture/Lab Combination
Spring 2008	HPR201	201	Team Sports for Majors	HPR	Health Phy Educ & Recreation	4	This activity class is for HPR majors and models best teaching practices in team sports such as basketball, soccer, softball, and volleyball. Students are required to demonstrate proficiency in sports skills.	UG	LL	Lecture/Lab Combination
Spring 2008	HPR202	202	Fundamental Activities	HPR	Health Phy Educ & Recreation	4	This activity class is for HPR majors and models best teaching practices in activities such as dance, fitness, and tumbling. Students are required to demonstrate proficiency in fundamental activity skills.	UG	LL	Lecture/Lab Combination
Spring 2008	HPR203	203	Leisure Act for Majors	HPR	Health Phy Educ & Recreation	4	This activity class is for HPR majors and models best teaching practices in leisure activities such as badminton, golf, tennis and yoga. Students are required to demonstrate proficiency in leisure activity skills.	UG	LL	Lecture/Lab Combination

Spring 2008	HPR212	212	Adapted Phys Ed & Recreation	HPR	Health Phy Educ & Recreation	4	Provides an overview of the etiological, physical, and psychological considerations of disabilities. Methods of adapting activities and supervised field experiences in physical education for individuals with disabilities.	UG	LL	Lecture/Lab Combination
Spring 2008	HPR213	213	Teaching Adapted Aquatics	HPR	Health Phy Educ & Recreation	3	Red Cross certification course in adapted aquatics. Concepts are given regarding teaching techniques, disabilities, and basic rescues specific to the population involved. Includes in class field/clinical experience.	UG	LL	Lecture/Lab Combination
Spring 2008	HPR214	214	Adapted Physical Activity	HPR	Health Phy Educ & Recreation	3	Rules and certification requirements of the various athletic opportunities for exceptional populations. Includes discussions of adaptive devices and special facilities used for these programs.	UG	LL	Lecture/Lab Combination
Spring 2008	HPR220	220	Fundamental Movements	HPR	Health Phy Educ & Recreation	3	Examination of basic content areas of physical education for grades K 6. Includes motor activities that aid the elementary-age child in developing fundamental movements and sports skills. Students must demonstrate cognitive and psychomotor abilities.	UG	LL	Lecture/Lab Combination

Spring 2008	HPR241	241	Intro Health Ed & Phys Ed	HPR	Health Phy Educ & Recreation	4	Introduces the developing professional to the nature and scope of health, physical education, and recreation. Includes degree and licensure requirements, professional organizations, career opportunities, historical perspectives, trends and issues in HPR and related fields.	UG	LL	Lecture/Lab Combination
Spring 2008	HPR243	243	Motor Development	HPR	Health Phy Educ & Recreation	4	Examination of motor skills used by young children to develop a foundation of fundamental movement patterns and skills. Several basic skills are defined and illustrated.	UG	LE	Lecture
Spring 2008	HPR244	244	Motor Learning	HPR	Health Phy Educ & Recreation	4	Studies of the theories of learning in relation to the acquisition of motor skills and the relationship of psychology to motor skills learning.	UG	LE	Lecture
Spring 2008	HPR245	245	HPR Checkpoint 1 Seminar	HPR	Health Phy Educ & Recreation	1	This course monitors students to the WSU Health Education and Physical Education Programs of Study.	UG	SE	Seminar
Spring 2008	HPR250	250	Basics-Anatomy & Physiology I	HPR	Health Phy Educ & Recreation	4	A study of anatomy and physiology correlating both structure and function of the human body. Topics include organization, skeletal system, muscular system, nervous system, circulatory system, and endocrine system.	UG	LL	Lecture/Lab Combination

Spring 2008	HPR251	251	Basics-Anatomy & Physiology II	HPR	Health Phy Educ & Recreation	4	A continuation of HPR 250. Topics include respiration, exercise, digestion, metabolism, urinary system, acid base balance, reproduction, and immune system.	UG	LL	Lecture/Lab Combination
Spring 2008	HPR251W	251W	Writing in HPR 251	HPR	Health Phy Educ & Recreation	0		UG	LB	Lab
Spring 2008	HPR260	260	First Aid	HPR	Health Phy Educ & Recreation	3	Standard Red Cross first aid course. Comprehensive study of first aid techniques and procedures in emergency treatment.	UG	LE	Lecture
Spring 2008	HPR261	261	Athletic Training	HPR	Health Phy Educ & Recreation	4	Introductory course in the field of athletic training and sports medicine pertinent to health and physical education.	UG	LE	Lecture
Spring 2008	HPR261L	261L	Athletic Training I Lab	HPR	Health Phy Educ & Recreation	0	Introductory course in the field of athletic training and sports medicine pertinent to health and physical education.	UG	LB	Lab
Spring 2008	HPR281	281	Phys Ed-Early & Mid Childhood	HPR	Health Phy Educ & Recreation	4	Curriculum teaching methods and materials in physical education for early and middle childhood (ages 3-14). Emphasis on goals of effective programs, activity for optimal growth development, content areas, and principles for teaching motor skills.	UG	LL	Lecture/Lab Combination

Spring 2008	HPR284	284	Practicum in HPR	HPR	Health Phy Educ & Recreation	1	Supervised fiedl work for sohpmore students who are seeking certification or a concentration in a specific area. Titles vary. Contact hours vary according to subject. May be taken for a letter grade or pass/unsatisfactory.	UG	PR	Practicum
Spring 2008	HPR311	311	Psychomotor Assess Ex Ch	HPR	Health Phy Educ & Recreation	4	Emphasis on developing knowledge and skill in diagnosing motor, physical, and sensory deficiencies in exceptional children. Administrative procedures and interpretation of numerous assessment instruments are covered.	UG	LE	Lecture
Spring 2008	HPR312	312	Motor Skills-Indv w/Mult Dis	HPR	Health Phy Educ & Recreation	3	Sensory-motor skill development of individuals as it relates to perceptual enhancement, IFSP and IEP development, mobility skills, and vocational fitness from early childhood to adulthood. Intended for students in adapted physical education, early childhood education, special education, and related disciplines.	UG	LE	Lecture

Spring 2008	HPR340	340	Org & Admin-HPR & ATH Prog	HPR	Health Phy Educ & Recreation	3	Organizational techniques, administrative procedures, and principles of managing school health education, physical education, recreation, and athletic programs. Includes scheduling, facilities, personnel, programs of instruction, and public relations.	UG	LE	Lecture
Spring 2008	HPR345	345	HPR Checkpoint 2 Seminar	HPR	Health Phy Educ & Recreation	1	This course monitors students' progress in Health Education and Physical Education and prepares them to enter the pedagogical portion of their program of study.	UG	SE	Seminar
Spring 2008	HPR353	353	Kinesiology	HPR	Health Phy Educ & Recreation	4	Analysis of muscular interrelationships in basic body movement and principles of mechanics as they relate to fundamental and complex motor skills in physical education activities.	UG	LE	Lecture
Spring 2008	HPR354	354	Psychology of Sport	HPR	Health Phy Educ & Recreation	3	Provides information to help the prospective teacher, coach, or sports medicine professional to effectively apply behavioral science principles to the performance aspects of sport and human movement.	UG	LE	Lecture

Spring 2008	HPR355	355	Applied Exercise Physiology	HPR	Health Phy Educ & Recreation	4	Practical applications in exercise physiology for the physical educator, coach, and athletic trainer. Methods of conditioning, training, implementation, and other special considerations included.	UG	LE	Lecture
Spring 2008	HPR356	356	Res Meas Eval Hlt & PE	HPR	Health Phy Educ & Recreation	4	Introduces students to the construction, evaluation, and interpretation of tests utilized in K-12 health and physical education. Emphasis is also placed on utilization of data to direct K-12 health education and physical education programming.	UG	LE	Lecture
Spring 2008	HPR356L	356L	Writing n HPR 356	HPR	Health Phy Educ & Recreation	0		UG	LB	Lab
Spring 2008	HPR356W	356W	Writing in HPR 356	HPR	Health Phy Educ & Recreation	0		UG	LB	Lab
Spring 2008	HPR362	362	Nutrition for Fitness & Sport	HPR	Health Phy Educ & Recreation	3	Nutrient and food energy needs of the individual who is physically active during the life cycle. Tissue maintenance, growth and development, immune function, energy development, the food pyramid, and sound dietary practices are investigated.	UG	LE	Lecture

Spring 2008	HPR384	384	Practicum in Health, PE & Rec	HPR	Health Phy Educ & Recreation	1	Supervised field work for junior students seeking certification or a concentration in a specific area. Topics vary. Contact hours vary according to subject. May be taken for letter grade or pass/unsatisfactory.	UG	IN	Internship
Spring 2008	HPR385	385	Foundation Teach PE I	HPR	Health Phy Educ & Recreation	4	This course introduces students to physical education pedagogy with an emphasis on the Praxis III model; evaluation of existing physical education curricula; National Standards for Physical Education; and the components of a unit plan.	UG	LE	Lecture
Spring 2008	HPR430	430	Coaching Theory	HPR	Health Phy Educ & Recreation	1	Theory, methods, skills, strategies, organization, psychology, ethics, conditioning, and general aspects of teaching and coaching a particular sport. Typical sports covered include baseball, basketball, and soccer.	UG	LE	Lecture
Spring 2008	HPR445	445	HPR Checkpoint 3 Seminar	HPR	Health Phy Educ & Recreation	2	This exit seminar requires candidates to demonstrate professional learned society competencies and their ability to impact student learning.	UG	SE	Seminar

Spring 2008	HPR484	484	Practicum in Health, PE & Rec	HPR	Health Phy Educ & Recreation	1	Supervised field work for senior students seeking certification or a concentration in a specific area. Titles vary. Contact hours vary according to subject. May be taken for letter grade or pass/unsatisfactory.	UG	IN	Internship
Spring 2008	HPR485	485	Foundation Teach PE II	HPR	Health Phy Educ & Recreation	4	This culminating experience has students apply physical education pedagogical skills through the development of a comprehensive physical education unit and resource plan.	UG	LE	Lecture
Spring 2008	HPR488	488	Independent Study	HPR	Health Phy Educ & Recreation	1	Independent reading, writing, and/or reporting in areas related to health, physical education, or recreation. Topics vary.	UG	IS	Independent Study
Spring 2008	HPR489	489	Workshop in Health, PE & Rec	HPR	Health Phy Educ & Recreation	1	Intensive study of content, curriculum, method, or materials designed to meet the needs of preservice and in-service professionals in health, physical education, and recreation. Titles vary.	UG	LE	Lecture
Spring 2008	HPR640	640	The Role of Nurse in Schools	HPR	Health Phy Educ & Recreation	1	The nurse as a member of the school health service team. Topics include educational foundations, administration of school health programs, school health services and environment, health counseling (including mental health), and legal and ethical issues. Instructor permission required.	GR	LE	Lecture

Spring 2008	HPR642	642	School Nursing Practicum	HPR	Health Phy Educ & Recreation	1	An opportunity for the student to take full responsibility for the application of principles of school health in a school setting under supervision of qualified university and school personnel. May be taken for a letter grade or pass/unsatisfactory. Instructor permission required.	GR	LE	Lecture
Spring 2008	HPR643	643	School Nursing Practicum	HPR	Health Phy Educ & Recreation	1	An opportunity for the student to take full responsibility for the application of principles of school health in a school setting under supervision of qualified university and school personnel. May be taken for a letter grade or pass/unsatisfactory. Instructor permission required.	GR	IN	Internship
Spring 2008	HPR680	680	Independent Study	HPR	Health Phy Educ & Recreation	1	Independent reading, writing, and/or reporting in an area related to health, physical education, or recreation. Titles vary.	GR	IS	Independent Study
Spring 2008	HPR688	688	Independent Study	HPR	Health Phy Educ & Recreation	1	Independent reading, writing, and/or reporting in an area related to health, physical education, or recreation. Titles vary.	GR	IS	Independent Study
Spring 2008	HPR689	689	Workshop in Health,PE & Rec	HPR	Health Phy Educ & Recreation	1	Intensive study of content, curriculum, method, or materials designed to meet the needs of pre-service and in-service professionals in health, physical education, and recreation. Titles vary.	GR	LE	Lecture

Spring 2008	HPR710	710	Phys Ed for Chdrn w/Spec Needs	HPR	Health Phy Educ & Recreation	4	Assessing students with handicapping conditions, planning appropriate physical activities based on this assessment, and providing the activities described in the plan.	GR	LE	Lecture
Spring 2008	HPR712	712	Motor Dev:Low Incidence Dsblty	HPR	Health Phy Educ & Recreation	4	Understand how disabilities impact psychomotor development, ADL, mobility, and independence of individuals with disabilities. Knowledge of activities that contribute to an active lifestyle.	GR	LE	Lecture
Spring 2008	HPR740	740	Admin-Intersholastic Athletics	HPR	Health Phy Educ & Recreation	4	Ways of directing interscholastic athletic programs. Emphasis on personnel administration, program development, facility management, fiscal management, and winning community and professional support.	GR	LE	Lecture
Spring 2008	HPR750	750	Scientific Foundtns-Conditiong	HPR	Health Phy Educ & Recreation	4	A study of scientific foundations for conditioning. Topics will include: excercise training techniques, heart rate, blood pressure, ventilation, strength, flexibility, and body composition. Laboratory methods will also be a part of this course.	GR	LE	Lecture

Spring 2008	HPR753	753	Assessment - Physical Activity	HPR	Health Phy Educ & Recreation	4	Focuses on selection of measurement materials, techniques of test administration, and essential statistical methods for scientific evaluation.	GR	LE	Lecture
Spring 2008	HPR760	760	Adv Athletic Training Tchnques	HPR	Health Phy Educ & Recreation	4	Examination of trauma, contusions, hematoma, strains, sprains, fractures, open wounds, and dislocations.	GR	LE	Lecture
Spring 2008	HPR780	780	Research Methods & Prog Eval	HPR	Health Phy Educ & Recreation	4	Study of successful program assessment and evaluation processes, related research methods, and grant/project development.	GR	LE	Lecture
Spring 2008	HST101	101	Ancient & Medieval Europe	HST	History	4	Examination of the character of the premodern world from prehistory through the 14th century with special attention to those aspects of ancient and medieval life that had the greatest effect on the development of Western society, politics, and culture.	UG	LE	Lecture
Spring 2008	HST102	102	Early Modern Europe	HST	History	4	Examination of the roots of the modern Western world emphasizing the revolution in economic, political, religious, and demographic realities that occurred between the 14th and 18th centuries.	UG	LE	Lecture

Spring 2008	HST103	103	Modern Europe:19th & 20th	HST	History	4	Examination of the nature and consequences of modernization, its failures, accomplishments, and problems with special attention to the phenomena that shaped the Western world of the 19th and 20th centuries.	UG	LE	Lecture
Spring 2008	HST200	200	W. Eur & Non-Western Wrld	HST	History	4	This course examines the social, cultural, economic, religious and/or political interactions between Western Europe and the non-Western World since 1500. Topics vary.	UG	LE	Lecture
Spring 2008	HST200W	200W	Writing in HST 200	HST	History	0		UG	LB	Lab
Spring 2008	HST211	211	American Civ to 1877	HST	History	4	Thematic survey of events, forces, groups, and individuals that contributed to and helped to shape an American civilization on the North American continent. Colonial foundations to 1877.	UG	LE	Lecture
Spring 2008	HST212	212	Amer Civ Since 1877	HST	History	4	Thematic survey of events, forces, groups, and individuals that contributed to and helped to shape an American civilization on the North American continent. 1877 to the present.	UG	LE	Lecture
Spring 2008	HST214	214	African-American History	HST	History	4	Survey of black people in American society from colonial slave trade to the present. African roots to 1877.	UG	LE	Lecture

Spring 2008	HST215	215	African-American History	HST	History	4	Survey of black people in American society from colonial slave trade to the present. Reconstruction to the present.	UG	LE	Lecture
Spring 2008	HST217	217	Ohio History	HST	History	4	Survey of Ohio History from its Native-American origins to Ohio in the Post-Industrial Age.	UG	LE	Lecture
Spring 2008	HST220	220	Intro to Gender History	HST	History	4	Courses will survey special topics in gender history,such as masculinity, femininity, sexuality, family, and women's history. Focus may be on one nation, region, or a comparative perspective.	UG	LE	Lecture
Spring 2008	HST220W	220W	Writing in HST 220	HST	History	0		UG	LB	Lab
Spring 2008	HST221	221	American Diversitiesq	HST	History	4	Examines differences that have shaped American life and the ways in which Americans have responded to diversity. Topics may include ethnicity, race, region, religion, gender, sexual orientation, economic and social class, and political ideology.	UG	LE	Lecture
Spring 2008	HST221W	221W	Writing in HST 221	HST	History	0		UG	LB	Lab
Spring 2008	HST400	400	Historiography	HST	History	4	May range from library research to field training.	UG	LE	Lecture
Spring 2008	HST400W	400W	Writing in HST 400	HST	History	0	Required writing component for HST 400.	UG	LB	Lab

Spring 2008	HST401	401	Research Seminar	HST	History	4	Students will learn to use various tools and techniques to prepare a significant research paperin conformity with contemporary standards and will share their work in a seminar setting.	UG	SE	Seminar
Spring 2008	HST401W	401W	Writing in HST 401	HST	History	0		UG	LB	Lab
Spring 2008	HST402	402	History Honors	HST	History	4	Examination of the various policies of the Latin American nations towards their neighbors, the areas of tensions which have developed, and the attempts at solution, from the period of the wars for independence to the present.	UG	IS	Independent Study
Spring 2008	HST405	405	Ancient History	HST	History	4	Courses offered under this number examine selected problems in Roman history to the death of Constantine in A.D. 337. Topics vary.	UG	LE	Lecture
Spring 2008	HST405W	405W	Writing in HST 405	HST	History	0	Required writing component for HST 405.	UG	LB	Lab
Spring 2008	HST410	410	The Middle Ages	HST	History	4	Studies the decline of the Roman Empire to ca. 1450. Topics vary and can include European, Islamic, and Byzantine civilizations.	UG	LE	Lecture
Spring 2008	HST415	415	Med & Erly Mod Euro Hst	HST	History	4	Examines selected problems in European history from the late Middle Ages through the Counter-Reformation. Topics include the Renaissance and Reformation.	UG	LE	Lecture

Spring 2008	HST415W	415W	Writing in HST 415	HST	History	0	Required writing component for HST 415.	UG	LB	Lab
Spring 2008	HST425	425	Modern European History	HST	History	4	Examines a variety of countries, topics and periods in European history from the Enlightenment to the present. Titles vary.	UG	LE	Lecture
Spring 2008	HST425W	425W	Writing in HST 425	HST	History	0	Required writing component for HST 425.	UG	LB	Lab
Spring 2008	HST435	435	British History	HST	History	4	Courses offered under this number examine particular periods of British history (e.g., modern Britain) or topics (e.g., British constitutional history). Topics vary.	UG	LE	Lecture
Spring 2008	HST435W	435W	Writing in HST 435	HST	History	0		UG	LB	Lab
Spring 2008	HST440	440	Topics in African History	HST	History	4	Variable titles covering a range of topics from pre-colonial to post-colonial Africa in the 20th century. Can be taken up to four (4) additional times (20 hours total) under variable titles.	UG	LE	Lecture
Spring 2008	HST440W	440W	Writing in HST 440	HST	History	0	Required writing component for HST 440.	UG	LB	Lab
Spring 2008	HST445	445	Middle Eastern History	HST	History	4	Courses offered under this number examine the Balkans and the Middle East from the Middle Ages to the present. Topics may include Byzantine history, the Crusades, and the Middle East today. Topics vary.	UG	LE	Lecture

Spring 2008	HST455	455	Latin American History	HST	History	4	Courses offered under this number examine selected Latin American nations (e.g., Mexico), particular topics (e.g., Authoritarianism), and Colonial Latin America. Titles vary.	UG	LE	Lecture
Spring 2008	HST455W	455W	Writing in HST 455	HST	History	0	Required writing component for HST 455.	UG	LB	Lab
Spring 2008	HST465	465	Asian History	HST	History	4	Examines various periods of Chinese, Japanese, and other East Asian histories or special topics.	UG	LE	Lecture
Spring 2008	HST465W	465W	Writing in HST 465	HST	History	0		UG	LB	Lab
Spring 2008	HST470	470	Early American History	HST	History	4	Required writing component for HST 470	UG	LE	Lecture
Spring 2008	HST470W	470W	Writing in HST 470	HST	History	0	Required writing component for HST 470.	UG	LB	Lab
Spring 2008	HST475	475	19th Century US History	HST	History	4	Courses offered under this number examine distinct periods in the 19th century (e.g., Civil War and reconstruction) and major topics such as slavery. Topics vary.	UG	LE	Lecture
Spring 2008	HST480	480	20th Century US History	HST	History	4	Courses offered under this number examine particular stages of the 20th-century American experience (e.g., the Progressive Era) or selected topics (e.g., the Civil Rights Movement). Topics vary.	UG	LE	Lecture
Spring 2008	HST480W	480W	Writing in HST 480	HST	History	0		UG	LB	Lab

Spring 2008	HST485	485	Special Topics in US Hst	HST	History	4	Courses offered under this number allow intensive analysis of topics drawn from the entire range of the American experience such as religion, diplomacy, women, immigration, and urbanization. Topics vary.	UG	LE	Lecture
Spring 2008	HST485W	485W	Writing in HST 485	HST	History	0	Required writing component for HST 485.	UG	LB	Lab
Spring 2008	HST486	486	Gender History	HST	History	4	Courses will allow intensive analysis of subjects in gender history. Topics may include masculinity, femininity, sexuality, family and women's history. Focus may be on one nation, region or comparative perspective. May be taken more than once for credit under different titles. Also listed as WMS 400.	UG	LE	Lecture
Spring 2008	HST486W	486W	Writing in HST 486	HST	History	0		UG	LB	Lab
Spring 2008	HST488	488	History and New Media	HST	History	4	Examines the impact of new media on access to primary sources, public programs, history education, scholarship, and the ways in which historians engage with each other. Presents productions in a variety of media.	UG	LE	Lecture
Spring 2008	HST490	490	Topics: African-Amer Hst	HST	History	4	Examines topics drawing from the African-American experience; may include black ideology and leadership, racial tension in urban society, and the civil rights movement. Topics vary.	UG	LE	Lecture

Spring 2008	HST491	491	Independent Readings	HST	History	1	Faculty-directed readings in a field of students' choice.	UG	IS	Independent Study
Spring 2008	HST495	495	Comparative History	HST	History	4	Courses offered under this number compare developments or movements in different parts of the world and/or different times in history such as revolutions, slave systems, religious movements, or other human experiences that transcend a particular time or place. Topics vary.	UG	LE	Lecture
Spring 2008	HST495W	495W	Writing in HST 495	HST	History	0		UG	LB	Lab
Spring 2008	HST600	600	Historiography	HST	History	4	Introduction to the work of representative historians and important theories of historical interpretation. Prerequisites: 18 hours of history.	GR	LE	Lecture
Spring 2008	HST605	605	Ancient History	HST	History	4	Selected problems in Roman history to the death of Constantine in A.D. 337.	GR	LE	Lecture
Spring 2008	HST610	610	The Middle Ages	HST	History	4	From the decline of the Roman Empire to ca. 1450. Topics vary and can include European, Islamic, and Byzantine civilizations.	GR	LE	Lecture
Spring 2008	HST615	615	Medieval & Early Mod Hst	HST	History	4	Selected problems in European history from the decline of the Roman Empire through the Renaissance and Reformation. Titles vary.	GR	LE	Lecture

Spring 2008	HST625	625	Modern European History	HST	History	4	Modern Europe from the Enlightenment to the present through a national (e.g., Germany), chronological (e.g., nineteenth century), or topical (e.g., socialism) approach. Titles vary.	GR	LE	Lecture
Spring 2008	HST635	635	British History	HST	History	4	Examines particular periods of British history (e.g., modern Britain) or topics (e.g., British constitutional history). Titles vary.	GR	LE	Lecture
Spring 2008	HST640	640	Topics in African History	HST	History	4	Variable titles covering a range of topics from the pre-colonial to post-colonial Africa in the 20th century. Can be taken up to four (4) additional times (20 hours total) under variable titles.	GR	LE	Lecture
Spring 2008	HST645	645	Middle Eastern History	HST	History	4	Coursed offered under this number examine the Balkans and the Middle East from the Middle Ages to the present. Topics may include Byzantine history, the Crusades, and the Middle East today. Several of these courses will be offered jointly with the Department of Political Science.	GR	LE	Lecture
Spring 2008	HST655	655	Latin American History	HST	History	4	Selected Latin American nations (e.g., Mexico), particular topics (e.g., Authoritarianism), and colonial Latin American. Titles vary.	GR	LE	Lecture
Spring 2008	HST665	665	Asian History	HST	History	4	Examines various periods of Chinese, Japanese, and other Asian histories or special topics.	GR	LE	Lecture

Spring 2008	HST670	670	Early American History	HST	History	4	Examines colonial, revolutionary, and early republic periods of American history.	GR	LE	Lecture
Spring 2008	HST675	675	19th Century US History	HST	History	4	Examines distinct periods in the nineteenth century (e.g., Civil War and Reconstruction) and major topics such as slavery. Titles vary.	GR	LE	Lecture
Spring 2008	HST680	680	20th Century US History	HST	History	4	Particular stages of the twentieth-century American experience (e.g., the Progressive era) or selected topics (e.g., the civil rights movement, oral history).	GR	LE	Lecture
Spring 2008	HST685	685	Special Topics in US Hst	HST	History	4	Intensive analysis of topics drawn from the entire range of the American experience, such as religion, diplomacy, women, material culture, immigration, and urbanization. Titles vary.	GR	LE	Lecture
Spring 2008	HST686	686	Gender History	HST	History	4	Courses will allow intensive analysis of subjects in gender history. Topics may include masculinity, femininity, sexuality, family and women's history. Focus may be on one nation, region or a comparative perspective.	GR	LE	Lecture
Spring 2008	HST688	688	History and New Media	HST	History	4	Examines the impact of new media on access to primary sources, public programs, history education, scholarship, and the ways in which historians engage with each other. Presents productions in a variety of media.	GR	LE	Lecture

Spring 2008	HST689	689	Hst Inst for Educators	HST	History	2	Intensive analysis of historical topics (e.g., nearby history, oral history) or distinctive periods and areas (e.g., French Revolution). Course will model approaches and introduce scholarship and resources of particular value to educators. Topics vary.	GR	LE	Lecture
Spring 2008	HST690	690	Topics in African-Amer Hi	HST	History	4	Examines topics drawn from the African American experience. Topics covered may include black ideology and leadership, racial tension in urban society, and the civil rights movement. Topics vary.	GR	LE	Lecture
Spring 2008	HST691	691	Independent Readings	HST	History	1	Faculty-directed readings in a field of student's choice.	GR	IS	Independent Study
Spring 2008	HST695	695	Comparative History	HST	History	4	Compares developments or movements in different parts of the world and/or different times in history. May compare revolutions, slave systems, religious movements, or other human experiences that transcend a particular time or place. Titles vary.	GR	LE	Lecture
Spring 2008	HST700	700	Historical Methods	HST	History	4	Intensive training in the research methods and materials of history.	GR	LE	Lecture
Spring 2008	HST701	701	Sem in US Hst to 1865	HST	History	4	May be repeated with content changes to a maximum of twelve credit hours.	GR	SE	Seminar
Spring 2008	HST702	702	Sem in US Hst Since 1865	HST	History	4	May be repeated with content change to a maximum of twelve credit hours.	GR	SE	Seminar

Spring 2008	HST703	703	Sem Anc Med & Mod Eur Hst	HST	History	4	May be repeated with content change to a maximum of twelve credit hours.	GR	SE	Seminar
Spring 2008	HST704	704	Sem in Modern Europe Hst	HST	History	4	May be repeated with content change to a maximum of twelve credit hours.	GR	SE	Seminar
Spring 2008	HST705	705	Sem in Latin Am Hst	HST	History	4	May be repeated with content change to a maximum of twelve credit hours.	GR	SE	Seminar
Spring 2008	HST706	706	Sem in Asian History	HST	History	4	May be repeated with content change to a maximum of twelve credit hours.	GR	SE	Seminar
Spring 2008	HST707	707	Sem in African Hst	HST	History	4	May be repeated with content change to a maximum of twelve credit hours.	GR	SE	Seminar
Spring 2008	HST708	708	Seminar in History	HST	History	4	Topics vary.	GR	SE	Seminar
Spring 2008	HST709	709	Top in African-Amer Hst	HST	History	4	Conducted as a reading seminar. Focuses on African diaspora in the Americas. Topics include the black experience in the United States and Latin America from the colonial period to the present. Topics vary.	GR	LE	Lecture
Spring 2008	HST710	710	Archives & Manuscripts	HST	History	4	Fundamental problems, theoretical principles, techniques, and practical administration of archives and manuscripts; the importance of records in the modern information age and the relationship of archives administration and records management; history of archives.	GR	LE	Lecture

Spring 2008	HST711	711	Local History Research	HST	History	2	Defines and discusses the origin and development of local history. Students will learn to identify, locate and use primary and secondary sources on a variety of local history topics.	GR	LE	Lecture
Spring 2008	HST712	712	Museum Admin & Collection	HST	History	4	Introduction to museums and their management; the establishment, functions, rules and duties of non-profits. Introduction to collections theory and practice as well as collections policies, accessioning, deaccessioning, management, care, treatment, and conservation.	GR	LE	Lecture
Spring 2008	HST713	713	Hist Interp & Exhibits	HST	History	4	Examines interpretation theory and practice. Students will design and construct a museum exhibit including budgeting, research, design, construction, artifact selection, media relations and opening reception.	GR	LE	Lecture
Spring 2008	HST714	714	Adv Prob Archival Work	HST	History	4	Students will put into practice the theories and concepts associated with appraisal and acquisition, arrangement and description, reference, and preservation of archival materials. Coursework includes practical experience in processing and preserving an archival collection.	GR	LE	Lecture

Spring 2008	HST715	715	Public History Internship	HST	History	5	Practical training in various aspects of public history and historical administration. Students complete a 300-clock-hour internship and prepare a report on the experience. Permission of the Public History Program Director required.	GR	IN	Internship
Spring 2008	HST716	716	Historical Preservation	HST	History	4	Overview of the history and practices of architectural preservation. Introduces students to the supervision of, or participation in, the preservation program of an historical organization.	GR	LE	Lecture
Spring 2008	HST717	717	Practica: Archives & Muse	HST	History	1	Archivists' and preservationists' techniques. Titles vary. Graded pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	HST720	720	Project	HST	History	1	Students complete an historical project (editing a diary, processing a manuscript collection, curating an exhibit, preparing a research report). Permission of the Public History Program Director required.	GR	IS	Independent Study
Spring 2008	HST725	725	Intro Public History	HST	History	4	Introduces students to the origins, nature and varieties of Public History and to careers in the field. Explores issues of ethics and public memory.	GR	LE	Lecture

Spring 2008	HST727	727	Topics in Public History	HST	History	4	Intensive analysis of topics related to the theory and practice of public history such as American decorative art, archictectural history, history of photography, and history of technology. A. Introduction to American Decorative Arts. The identification of artifacts which may be found in a history museum collection such as furniture, glassware, ceramics and fabrics, by date, material, use, style, and manufacture. B. American Architectural History (previously HST 716 alternate designation).	GR	LE	Lecture
Spring 2008	HST730	730	Archival Records Tech	HST	History	2	Introduces the uses of digital electronic records systems in an archival setting.	GR	LE	Lecture
Spring 2008	HST740	740	Information Management	HST	History	2	Examines the processes and concepts associated with records and information management in a variety of institutional settings.	GR	LE	Lecture
Spring 2008	HST750	750	Seminar in Gender History	HST	History	4	Subjects vary, with a focus on gender as a tool of historical analysis. Topics may include masculinity, femininity, sexuality, family and women's history. Focus may be on one nation region or a comparative perspective.	GR	SE	Seminar
Spring 2008	HST789	789	Continuing Registration	HST	History	1		GR	IS	Independent Study

Spring 2008	HST799	799	Thesis	HST	History	1		GR	IS	Independent Study
Spring 2008	HUM700	700	Graduate Intro - Humanities I	HUM	Humanities	4	A general introduction to interdisciplinary graduate study in the humanities.	GR	SE	Seminar
Spring 2008	HUM710	710	Grad Research Methods in Hum	HUM	Humanities	4	An introduction to graduate research in the humanities with primary emphasis on research writing.	GR	SE	Seminar
Spring 2008	HUM720	720	Graduate Intro - Humanities II	HUM	Humanities	4	Exploration of a single topic or problem from the perspective of a number of disciplines in the humanities.	GR	SE	Seminar
Spring 2008	HUM730	730	Humanities Project	HUM	Humanities	1	Individual project with an advisor. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	HUM789	789	Continuing Registration	HUM	Humanities	1		GR	IS	Independent Study
Spring 2008	HUM791	791	Topics in Humanities	HUM	Humanities	2	Problems, approaches, experiments, and speculations in the Humanities.	GR	SE	Seminar
Spring 2008	HUM799	799	Directed Studies	HUM	Humanities	1	Individual study in the humanities under the direction of a faculty supervisor. Scope of project must be outlined in advance. Titles vary.	GR	IS	Independent Study
Spring 2008	IB201	201	Int'l Business and Trade	IB	International Business	4	Survey of international business and trade functions and processes. The course is designated to familiarize individuals with fundamental principles and practices of international trade management. Open only to non-business majors.	UG	LE	Lecture
Spring 2008	IB477	477	Indep Study: Int'l Bus	IB	International Business	1	Reading or research in a select field of International Business. Topics vary.	UG	IS	Independent Study

Spring 2008	IB478	478	Hon: Ind Study in IB	IB	International Business	2	Research in International Business for fulfillment of the honors program project requirement.	UG	IS	Independent Study
Spring 2008	IB480	480	Spec Topics in IB	IB	International Business	1	Reading or research in a select field of international business. Topics vary. Enrollment restriction: instructor permission only.	UG	LE	Lecture
Spring 2008	IB481	481	Int'l Trade Internship	IB	International Business	1	Practical application in international trade. Integrates academic learning with work experiences. Students apply classroom learning in an organizational setting. Limited to international business majors with senior status.	UG	IN	Internship
Spring 2008	IB482	482	Business in the EU	IB	International Business	4	This course studies, in both English and French, fundamental concepts of doing business, managing, and marketing in the European Union. Examines cultural, institutional, behavioral, and management systems and their operations in the EU.	UG	LE	Lecture
Spring 2008	IB483	483	Business in L. America	IB	International Business	4	This course studies, in both English and Spanish, fundamental concepts of doing business, managing, marketing in Latin America. Examines cultural, institutional, behavioral, and management systems and their operation in Latin America.	UG	LE	Lecture

Spring 2008	IB483W	483W	Writing in International Bus	IB	International Business	0		UG	LB	Lab
Spring 2008	IB486	486	Int'l Trade Management	IB	International Business	4	Overview and application of the concepts and principles required to conduct import and export operations within the firm. Students will prepare an international trade plan.	UG	LE	Lecture
Spring 2008	IB486W	486W	Writing in IB 486	IB	International Business	0	Required writing component for IB 486.	UG	LB	Lab
Spring 2008	IB496	496	Int'l Trade Consulting	IB	International Business	4	This course provides students with the opportunity to consult for small and medim sized companies on international business and trade problems. May be used to satisfy the IB major internship requirement.	UG	LE	Lecture
Spring 2008	IB680	680	Special Topics Intn'l Bus	IB	International Business	1	Reading or research in a selected field of international business. Topics vary.	GR	LE	Lecture
Spring 2008	IB780	780	Int'l Business Internship	IB	International Business	1	Practical application in international trade. Integrates academic learning with work experiences. Students apply classroom learning in an organizational setting. Titles vary.	GR	IN	Internship
Spring 2008	IB781	781	Special Studies Int'l Bus	IB	International Business	1	Intensive reading or research in a selected field of advanced international business. Titles vary.	GR	IS	Independent Study
Spring 2008	IE400	400	International Education	IE	International Education	1		UG	IS	Independent Study

Spring 2008	IE700	700	International Education	IE	International Education	1		GR	IS	Independent Study
Spring 2008	ISE195	195	Fund of Indust & Sys Egr	ISE	Industrial & Systems Engr	2	Provides students with an overview of how engineers design, develop, implement, and improve integrated systems that include people, materials, information, equipment, and energy. (Previously listed as HFE 195.)	UG	LE	Lecture
Spring 2008	ISE210	210	Engineering Perspectives	ISE	Industrial & Systems Engr	4	Explores engineering history and cultures; discusses ethical aspects of professional engineering decisions as they affect the environment and society; introduces graphical presentation software, electronic spreadsheets, statistics, and other analytical tools for solving engineering problems.	UG	LE	Lecture
Spring 2008	ISE210W	210W	Writing in ISE 210	ISE	Industrial & Systems Engr	0	Required writing component for ISE 210.	UG	LB	Lab
Spring 2008	ISE300	300	Honors Program Seminar	ISE	Industrial & Systems Engr	0	An orientation course intended for juniors who have demonstrated exceptional academic ability and desire to conduct meaningful independent research or solve unique engineering design projects during their senior year. Meets 5 times during quarter.	UG	SE	Seminar

Spring 2008	ISE301	301	Stats for Dev & Manuf I	ISE	Industrial & Systems Engr	4	Presentation of statistical techniques as applied to engineering testing, development, and manufacturing. Introduces and applies probability distributions, measures of association, inferences on responses, and basic experimental design. Emphasizes application of statistical tools.	UG	LE	Lecture
Spring 2008	ISE302	302	Stats for Dev & Manuf II	ISE	Industrial & Systems Engr	4	Continuation of HFE 301. Focus on analysis techniques for multiple variables, including ANOVA and multiple regression, as applied to engineering testing, development, and manufacturing. Process analysis and improvement techniques presented, along with tools for reliability analysis.	UG	LE	Lecture
Spring 2008	ISE405	405	I&E Seminar Series	ISE	Industrial & Systems Engr	1	Seminars meet once a week. Guest lecturers from high-tech companies provide insight on entrepreneurship and innovation. Students gain an understanding of the associated challenges, as well as the resources available within the community.	UG	SE	Seminar
Spring 2008	ISE406	406	Hum Fact in Egr & Desg	ISE	Industrial & Systems Engr	4	Introduction to the study of human factors in the design and operation of machine systems.	UG	LE	Lecture

Spring 2008	ISE407	407	Industrial Ergonomics	ISE	Industrial & Systems Engr	4	Introduction to the application of ergonomic principles to the industrial environment. Includes ergonomic planning and implementation, the work environment, NIOSH work factors, and work-station and equipment design.	UG	LE	Lecture
Spring 2008	ISE431	431	HFE of Visual Displays	ISE	Industrial & Systems Engr	4	Introduction to the design of visual display systems. Topics include radiometry and photometry, visual perception, linear systems analysis, color displays, colorimetry three-dimensional displays, standards, and guidelines.	UG	LE	Lecture
Spring 2008	ISE450	450	Human Factors Analysis	ISE	Industrial & Systems Engr	3	Provides human factors engineering students access to a variety of engineering and behavioral analytic techniques critical to the study of work performance.	UG	LE	Lecture
Spring 2008	ISE450L	450L	Human Fact Analysis Lab	ISE	Industrial & Systems Engr	0	Required laboratory for ISE 450.	UG	LB	Lab
Spring 2008	ISE451	451	ISE in Computer Sys Dsgn	ISE	Industrial & Systems Engr	4	Theoretical paradigms in human-computer interaction and their application to interface design are examined. Emphasis is on advanced interface technologies, such as multimodel input/output, hypertext, and knowledge-based systems.	UG	LE	Lecture

Spring 2008	ISE451L	451L	HFE in Comput Sys Dsgn Lab	ISE	Industrial & Systems Engr	0	Required laboratory for ISE 451.	UG	LB	Lab
Spring 2008	ISE456	456	Human Factors Egr Lab	ISE	Industrial & Systems Engr	2	A stand alone laboratory course structured to expose students to equipment and procedures used in human factors engineering research and design.	UG	LB	Lab
Spring 2008	ISE465	465	Interactive Sys Modeling	ISE	Industrial & Systems Engr	4	(Also listed as CEG 465.) Provide students experience in interactive real-time simulation, design, and implementation and evaluation of interfaces to simulations. The relevant topics are explored through application in supervisory control of complex, dynamic systems.	UG	LE	Lecture
Spring 2008	ISE470	470	Det Oper Research Models	ISE	Industrial & Systems Engr	4	Introductory course on Deterministic Models in Operation Research and their Applications in Industrial and Systems Engineering. Students will formulate appropriate models, and obtain and interpret analytical results in the context of ISE problems.	UG	LE	Lecture

Spring 2008	ISE471	471	Sys Perform Modeling	ISE	Industrial & Systems Engr	4	Study of quantitative techniques to analyze and predict systems performance. Topics include queuing models, system simulation, model validation, data collection, quantitative analysis of system performance, and system design evaluation.	UG	LE	Lecture
Spring 2008	ISE472	472	Design I	ISE	Industrial & Systems Engr	3	Segment one of the ISE senior design sequence. Introduction to patents and engineering ethics included. Practicum results in the definition of the capstone design project to be completed in ISE 473 and ISE 474.	UG	LE	Lecture
Spring 2008	ISE472W	472W	Writing in ISE 472	ISE	Industrial & Systems Engr	0	Required writing component for ISE 472.	UG	LB	Lab
Spring 2008	ISE473	473	Design II	ISE	Industrial & Systems Engr	3	Sement two of the ISE senior design sequence. Enables students to make use of design and analytical tools for a realistic problem.	UG	LE	Lecture
Spring 2008	ISE473W	473W	Writing in ISE 473	ISE	Industrial & Systems Engr	0		UG	LB	Lab
Spring 2008	ISE474	474	Design III	ISE	Industrial & Systems Engr	3	Segment three of the ISE senior design sequence. Practicum results in the final engineering design and completion of the design project.	UG	LE	Lecture

Spring 2008	ISE474W	474W	Writing in ISE 474	ISE	Industrial & Systems Engr	0		UG	LB	Lab
Spring 2008	ISE476	476	Aerospace Human Factors	ISE	Industrial & Systems Engr	4	Application of human factors engineering concepts to aerospace systems design. Develops human factors engineering influence on aerospace system dynamics, structure, and control as well as impact on reliability and maintainability.	UG	LE	Lecture
Spring 2008	ISE477	477	System Process Analysis	ISE	Industrial & Systems Engr	4	Explores engineering management practices including basic problem formulation, process analysis, and system improvement using modern software application programs for flow charting, process mapping, activity modeling, critical path analysis, and program evaluation review techniques.	UG	LE	Lecture
Spring 2008	ISE478	478	Comp Models for ISE	ISE	Industrial & Systems Engr	4	Design and implement ISE-focused decision support systems built on existing user interface and computational modules. Applications of linear programming, discrete event siumlation, and operations research methods in dicision support roles.	UG	LE	Lecture

Spring 2008	ISE480	480	Egr in Occup Sfty & Hlth	ISE	Industrial & Systems Engr	4	Discusses and demonstrates the role and responsibility of engineers in occupational safety and health related issues. Focuses on the applications of human factors engineering design principles as a proactive approach for controlling occupational injuries.	UG	LE	Lecture
Spring 2008	ISE481	481	Engineering Economy	ISE	Industrial & Systems Engr	4	Introduction to analytical methods and techniques for optimizing the economic outcome of technical and managerial decisions. Includes time value of money, annual costs, present worth, future value, capitalized cost break-even analysis, and valuation and depreciation.	UG	LE	Lecture
Spring 2008	ISE482	482	Oper & Facilities Design	ISE	Industrial & Systems Engr	4	Provides a fundamental understanding of techniques for the layout and organization of operations in modern production and service facilities.	UG	LE	Lecture
Spring 2008	ISE483	483	Integ Sys for Manufact	ISE	Industrial & Systems Engr	4	Explores industrial engineering concepts and quantitative techniques as it applies to manufacturing planning and control systems. Discusses production and service industries as well as supply chain systems.	UG	LE	Lecture

Spring 2008	ISE484	484	Prob Methods in OR	ISE	Industrial & Systems Engr	4	Provide an in-depth coverage of theory and methods to the analysis and design of probabilistic systems. Topics include conditional probability, markov chains, and queuing theory.	UG	LE	Lecture
Spring 2008	ISE485	485	Six Sigma for Engineers	ISE	Industrial & Systems Engr	4	The course introduces students to the practical application of Six Sigma tools in manufacturing and service projects. The course also includes videotapes and case studies of real-world industrial operations.	UG	LE	Lecture
Spring 2008	ISE490	490	Tech Based Ventures	ISE	Industrial & Systems Engr	4	Train students on methods to develop breakthrough products with an entrepreneurial perspective and managerial outlook. Topics include advanced product development, protecting intellectual property, fostering strategic and creative thinking, effectively leading technology-driven teams.	UG	LE	Lecture
Spring 2008	ISE499	499	Special Problems in ISE	ISE	Industrial & Systems Engr	1	Special topics in human factors engineering. Topics vary. (Previously listed as HFE 499.)	UG	LE	Lecture
Spring 2008	IT101	101	Graphic Terminology/ Dsgn Cncpt	IT	Information Technology	3	Desktop publishing and graphic terminology used in today's graphics communications will be explored as well as principles of design in printed media. Trends, history and ethics are studies through print media.	UG	LE	Lecture

Spring 2008	IT121	121	Beginning Photography	IT	Information Technology	3	Introduction to the fundamentals and basic terminology of photography. The student will learn proper photography techniques including posing subjects and using photo editing software to enhance photography. 2 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	IT122	122	Intermediate Photography	IT	Information Technology	3	Continuation of IT 121. Intermediate photography techniques and terminology. The students will aquire skills in photography layout and design using various phot editing software packages. 2 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	IT130	130	Art In Graphic Design	IT	Information Technology	3	Exploration of how art applications relate to graphic design. Application of design principles including organization and art techniques will be covered.	UG	LE	Lecture
Spring 2008	IT140	140	Typography I	IT	Information Technology	3	Introduction to the fundamentals of typography as an element and tool of visual communication. Students will learn how fonts work in relation to various software programs to produce creative and marketable typographic design. 1 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	IT141	141	Typography II	IT	Information Technology	3	Continuation of IT 140. Emphasis on advanced type techniques and formatting. Students will learn design-applying concepts in advanced font and design projects. 2 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	IT160	160	prin of Color Theory	IT	Information Technology	3	Fundamentals of digital output, development of color separations, media and printing techniques emphasizing the manufacturing processes. A basic course in color and its relationship to computer praphic design and printed materials.	UG	LE	Lecture
Spring 2008	IT201	201	Photoshop I	IT	Information Technology	3	An introduction to computer imaging and photo manipulation using raster-based Photoshop software. Filters and text will be explored. 2 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	IT202	202	Photshop II	IT	Information Technology	3	An intermediate computer couse in imaging and photo manipulation. Students will use Adobe Photoshop to create original graphics and modify existing images. 2 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	IT210	210	Graphics I	IT	Information Technology	3	an introduction to the tools, palettes and features in th eAdobe InDesign software. Students will use these features, along with previously learned design skills in working with objects. 2 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	IT211	211	Graphics II	IT	Information Technology	3	demonstration of basic to intermediate drawing techniques using Adobe Illustrator software. Students will apply previous design and color theory knowledge in the developement of illustrations.	UG	LE	Lecture
Spring 2008	IT220	220	Web Theory & Design I	IT	Information Technology	3	Introductory course to web authoring and programming using basic HTML authoring tools as well as Microsoft FrontPage software. 2 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	IT221	221	Web Theory & Design II	IT	Information Technology	3	Focus on the exploration of additional web design software. Production will move beyond the basics, adding form objects and other enhancements using Micromedia Dreamweaver web design software. 2 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	IT222	222	Web Design & Theory III	IT	Information Technology	3	construction of a comprehensive web site using various applied techniques and applications utilizing various software packages. 2 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	IT230	230	E-Commerce/Advertising	IT	Information Technology	3	Techniques and stratagies used in advertising and e-commerce will be explored and utilized in design applications in relation to graphic design. 2 hours lecture/2hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	IT250	250	Adv Software Exploration	IT	Information Technology	3	Exploration of industry leading web and graphic software. Topics to be covered will vary based on current industry needs and current software in the market. 2 hours lecture/2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	IT270	270	Capstone Project	IT	Information Technology	3	Capstone project. This course will allow the student to complete a comprehensive project in graphic design or web page development utilizing the variety of software packages covered during the two-year degree program.	UG	LL	Lecture/Lab Combination
Spring 2008	IT295	295	Independent Study	IT	Information Technology	1	Directed study on selected topics.	UG	IS	Independent Study
Spring 2008	IT299	299	Internship	IT	Information Technology	4	This course will allow the student to complete an internship at an approved site utilizing aquired graphic and web development packages and skills. Sophomore standing.	UG	IN	Internship

Spring 2008	ITA101	101	First-Year Italian	ITA	Italian	4	Study of the vocabulary and structure of the Italian language; practice in conversation, reading, and writing. 101, 102, 103 must be taken in sequence.	UG	LE	Lecture
Spring 2008	ITA102	102	First-Year Italian	ITA	Italian	4	Study of the vocabulary and structure of the Italian language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	ITA103	103	First-Year Italian	ITA	Italian	4	Study of the vocabulary and structure of the Italian language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	ITA111	111	Essentials of Italian	ITA	Italian	4	Introduction to Italian with emphasis on speaking the language.	UG	LE	Lecture
Spring 2008	ITA112	112	Essentials of Italian	ITA	Italian	4	Introduction to Italian with an emphasis on speaking the language. May be taken for a letter grade or pass unsatisfactory.	UG	LE	Lecture
Spring 2008	ITA201	201	Second-Year Italian	ITA	Italian	4	Continued study of the Italian language with practice in speaking, reading, and writing. 201 and 202 must be taken in sequence.	UG	LE	Lecture
Spring 2008	ITA202	202	Second-Year Italian	ITA	Italian	4	Continued study of the Italian language with practice in speaking, reading, and writing.	UG	LE	Lecture
Spring 2008	ITA203	203	Second Year Italian	ITA	Italian	4	Continued study of the Italian language with practice in listening, speaking, reading and writing.	UG	LE	Lecture

Spring 2008	ITL789	789	Int'l Continued Registration	ITL	Intl Continued Registration	0	International studnets in graduate programs requiring a thesis or dissertation and who have completed all degree requirements may register for ITL 789. This course is not graded and does not carry a tuition charge.	GR	LE	Lecture
Spring 2008	JPN101	101	First Year Japanese	JPN	Japanese	4	Study of the vocabulary and structure of the Japanese language; practice in conversation, reading, and writing. 101, 102, 103 must be taken in sequence.	UG	LE	Lecture
Spring 2008	JPN102	102	First Year Japanese	JPN	Japanese	4	Study of the vocabulary and structure of the Japanese language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	JPN103	103	First Year Japanese	JPN	Japanese	4	Study of the vocabulary and structure of the Japanese language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	JPN111	111	Essentials of Japanese	JPN	Japanese	4	Introduction to Japanese with emphasis on speaking the language.	UG	LE	Lecture
Spring 2008	JPN201	201	Second Year Japanese	JPN	Japanese	4	Continued study of the Japanese language with practice in speaking, reading, and writing.	UG	LE	Lecture
Spring 2008	JPN202	202	Second Year Japanese	JPN	Japanese	4	Continued study of the Japanese language with practice in speaking, reading, and writing.	UG	LE	Lecture

Spring 2008	JPN203	203	Second Year Japanese	JPN	Japanese	4	Continued study of the Japanese language, with practice in listening, speaking, reading and writing.	UG	LE	Lecture
Spring 2008	JPN311	311	Japanese Conversation	JPN	Japanese	4	Practice in oral use of Japanese, emphasizing the culture of the Japanese world.	UG	LE	Lecture
Spring 2008	JPN312	312	Japanese Conversation	JPN	Japanese	4	Language Development in Japanese, emphasizing the culture of the Japanese world.	UG	LE	Lecture
Spring 2008	JPN313	313	Japanese Conversation	JPN	Japanese	4	Oral interaction in Japanese, emphasizing the culture of the Japanese world.	UG	LE	Lecture
Spring 2008	LA101	101	Introduction to Liberal Arts	LA	Liberal Arts	2	Introduces liberal arts with an overview of program and career opportunities. Includes strategies for achieving academic success through time management, communication skills, note taking, test study, test taking, and enrichment opportunities.	UG	LE	Lecture
Spring 2008	LA199	199	Great Decisions	LA	Liberal Arts	1	Faculty-led reading and discussion group centering on major foreign policy issues facing the United States. Topics vary.	UG	LE	Lecture
Spring 2008	LA201	201	Effective Career Planning	LA	Liberal Arts	2	Assists students in developing academic major and career goals through identifying skills and interests and then researching appropriate options.	UG	SE	Seminar

Spring 2008	LA203	203	Sophomore Cooperative Edu	LA	Liberal Arts	2	Work experience in a liberal arts discipline. Faculty supervise and evaluate learning that requires planned and approved learning objectives, oral and/or written reports, employer evaluation, and conference with faculty supervisor. May be repeated three times.	UG	IN	Internship
Spring 2008	LA205	205	Sophomore Cooperative Edu	LA	Liberal Arts	4	Work experience in a liberal arts discipline. Faculty supervise and evaluate learning that requires planned and approved learning objectives, oral and/or written reports, employer evaluation, and conference with faculty supervisor. May be repeated twice.	UG	IN	Internship
Spring 2008	LA303	303	Junior Cooperative Education	LA	Liberal Arts	2	Work experience in a liberal arts discipline. Faculty supervise and evaluate learning that requires planned and approved learning objectives, oral and/or written reports, employer evaluation, and conference with faculty supervisor. May be repeated three times.	UG	IN	Internship

Spring 2008	LA305	305	Junior Cooperative Education	LA	Liberal Arts	4	Work experience in a liberal arts discipline. Faculty supervise and evaluate learning that requires planned and approved learning objectives, oral and/or written reports, employer evaluation, and conference with faculty supervisor. may be repeated three times.	UG	IN	Internship
Spring 2008	LA399	399	Studies in Selected Subjects	LA	Liberal Arts	4	Work experience in a liberal arts discipline. Faculty supervise and evaluate learning that requires planned and approved learning objectives, oral and/or written reports, employer evaluation, and conference with faculty supervisor. may be repeated three times.	UG	LL	Lecture/Lab Combination
Spring 2008	LA401	401	Implementing Career Decisions	LA	Liberal Arts	2	Assists students in their career/job search. Through research, analysis, and structured exercises, the participants learn effective job-seeking skills. Final results for students should include discovering, exploring, and locating satisfying job situations.	UG	LE	Lecture

Spring 2008	LA403	403	Senior Cooperative Education	LA	Liberal Arts	2	Work experience in a liberal arts discipline. Faculty supervise and evaluate learning that requires planned and approved learning objectives, oral and/or written reports, employer evaluation, and conference with faculty supervisor. May be repeated three times.	UG	IN	Internship
Spring 2008	LA405	405	Senior Cooperative Education	LA	Liberal Arts	4	Work experience in a liberal arts discipline. Faculty supervise and evaluate learning that requires planned and approved learning objectives, oral and/or written reports, employer evaluation, and conference with faculty supervisor. May be repeated twice. Prerequisite: full-time work experience.	UG	IN	Internship
Spring 2008	LA490	490	Senior Project-Selected Stds	LA	Liberal Arts	1	Intensive studies or work in a selected topic.	UG	LE	Lecture
Spring 2008	LAT101	101	Beginning Latin	LAT	Latin	4	Essentials of the Latin language.	UG	LE	Lecture
Spring 2008	LAT102	102	Beginning Latin	LAT	Latin	4	Essentials of the Latin language.	UG	LE	Lecture
Spring 2008	LAT103	103	Beginning Latin	LAT	Latin	4	Essentials of the Latin language.	UG	LE	Lecture
Spring 2008	LAT201	201	Intermediate Latin	LAT	Latin	4	Review of essentials and reading for comprehension in selected authors.	UG	LE	Lecture
Spring 2008	LAT202	202	Intermediate Latin	LAT	Latin	4	Review of essentials and reading for comprehension in selected authors.	UG	LE	Lecture

Spring 2008	LAT351	351	Readings in Roman Drama	LAT	Latin	4	Plautus, Terence, and Seneca. Study of at least one play in Latin. Topics include importance of Plautus and Terence for the reconstruction of Greek New Comedy, architecture of the Roman theatre, history of Roman tragedy, and the relationship of Seneca's tragedies to his Stoic philosophy.	UG	LE	Lecture
Spring 2008	LAT353	353	Readings in Roman Epic	LAT	Latin	4	Virgil's Aeneid, Ovid's Metamorphoses; Lucan, Statius, Valerius Flaccus, and Silius. Topics include intent and structure of the Aeneid, history and development of Roman epic, structure and transitional devices in the Metamorphoses, and the nature of rhetorical epic.	UG	LE	Lecture
Spring 2008	LAT355	355	Readings in Roman Poetry	LAT	Latin	4	Roman lyric and elegiac poetry: Virgil's Eclogues; Catullus, Horace, Propertius, Tibullus, and Ovid. Topics include meters and style of Latin lyric, amatory tradition, and the influence of Hellenistic poetry.	UG	LE	Lecture
Spring 2008	LAT357	357	Readings in Roman Satire	LAT	Latin	4	Horace, Juvenal, Persius, Petronius, and Martial. Topics include development of this peculiar Roman genre, fragments of Lucilius, satirical methods and techniques, satiric epigram, and satire as a source of information about Roman private life.	UG	LE	Lecture

Spring 2008	LAT399	399	Studies in Selected Subjects	LAT	Latin	1	Problems, approaches, and topics in the field of Latin. Topics vary.	UG	LE	Lecture
Spring 2008	LAT451	451	Readings-Roman Didactic Lit	LAT	Latin	4	Study of Roman philosophical and didactic literature: Lucretius, Virgil's Georgics, Cicero's philosophical essays, and Quintilian. Topics include Roman attitudes toward Epicureanism, farming as a symbol of contemporary Roman politics, Cicero's synthesis of Greek philosophy, Quintilian, and a gentleman's education.	UG	LE	Lecture
Spring 2008	LAT453	453	Rdngs-Roman Hstry & Biography	LAT	Latin	4	Sallust, Livy, Tacitus, and Suetonius. Topics include Roman historiographical tradition, family and political influences, evidence from nonliterary sources, and influence from Greek historiography.	UG	LE	Lecture
Spring 2008	LAT455	455	Readings-Roman Politics & Gov	LAT	Latin	4	Cicero's political essays and speeches; the letters of Cicero and Pliny. Topics include the nature of Roman political campaigns, selections from Roman constitutional law, information from inscriptions, and Augustus' Res Gestae.	UG	LE	Lecture
Spring 2008	LAT481	481	Independent Reading	LAT	Latin	1		UG	IS	Independent Study

Spring 2008	LAT600	600	Special Project Workshop	LAT	Latin	1	Intensive study of Latin, including Latin pedagogy, designed for teachers and others who desire to improve or enhance existing ability. Topics vary.	GR	LE	Lecture
Spring 2008	LAT681	681	Independent Reading in Latin	LAT	Latin	4	Reading and discussion of selected works of Latin literature with emphasis on grammatical, rhetorical, literary, and cultural analysis and criticism. May be repeated for credit by number, but not by content. Prerequisite: three years college Latin or departmental permission. Topics vary.	GR	LE	Lecture
Spring 2008	LAW300	300	Legal Env of Business	LAW	Law	4	Legal environment in which business functions. Introduction to law and legal systems, civil law, and white-collar crime. Public law topics include government regulation. Orivate law topics include torts and contracts.	UG	LE	Lecture
Spring 2008	LAW300W	300W	Writing in LAW 300	LAW	Law	0		UG	LB	Lab
Spring 2008	LAW420	420	Leg Asp Mgt Divr Wrk	LAW	Law	4	U.S. and state employment discrimination law, court decisions, enforcement and workforce diversity.	UG	LE	Lecture

Spring 2008	LAW440	440	Law for Managers	LAW	Law	4	This course acquaints students with two major areas of study, employer and employee rights and responsibilities. Both are basic areas of common business knowledge required for effective human resource management within organizations.	UG	LE	Lecture
Spring 2008	LAW477	477	Special Studies	LAW	Law	1	Reading or research in selected area of business law.	UG	IS	Independent Study
Spring 2008	LAW480	480	Special Topics in Law	LAW	Law	1	Topics vary.	UG	LE	Lecture
Spring 2008	LAW620	620	Leg Asp Mgt Divrs Wrk	LAW	Law	4	U.S. and state employment discrimination law, court decisions, enforcement, and workforce diversity.	GR	LE	Lecture
Spring 2008	LAW680	680	Spec Topics: Bus & Govt	LAW	Law	4	Deals with current problems of interest and value in the area of business. Topics include government regulation of business, social responsibility of business, and legal problems in business.	GR	LE	Lecture
Spring 2008	LAW735	735	Law for Accountants	LAW	Law	4	Course covers the legal implications of business transactions, particularly as they relate to accounting and auditing. It includes agency law, business structures, government regulation of business, and the Uniform Commercial Code.	GR	LE	Lecture
Spring 2008	LAW781	781	Special Studies in Bus	LAW	Law	1	Topics vary.	GR	LE	Lecture

Spring 2008	LEP001	001	LEAP Program Level 1	LEP	LEAP	0		UG	LE	Lecture
Spring 2008	LEP002	002	LEAP Program Level 2	LEP	LEAP	0		UG	LE	Lecture
Spring 2008	LEP003	003	LEAP Program Level 3	LEP	LEAP	0		UG	LE	Lecture
Spring 2008	LEP004	004	LEAP Bridge Program	LEP	LEAP	0		UG	LE	Lecture
Spring 2008	LI371	371	Intro to Hstrcl & Cmprtve Ling	LI	Linguistics	4	Principles of historical and comparative study of languages; introduction to Indo-European, Germanic, Romance, and Slavic philology.	UG	LE	Lecture
Spring 2008	LI399	399	Studies in Selected Subjects	LI	Linguistics	1	Deals with problems, approaches, and topics in the field of linguistics. Topics vary.	UG	LE	Lecture
Spring 2008	LWD710	710	Physiology of Disability	LWD	Learning with Disabilities	4	This course introduces the student to the physiological and anatomical basis of physical disabilities, including disorders or cognition, impaired mobility and sensory deprivation.	GR	LE	Lecture
Spring 2008	LWD720	720	Science of Learning	LWD	Learning with Disabilities	4	Survey the field of cognitive psychology with emphasis on those aspects that relate to problems of learning and skill development. Introduce major theoretical perspectives on cognition and learning. Survey empirical work that reflects the different perspectives.	GR	LE	Lecture

Spring 2008	LWD730	730	Adaptations for Disability	LWD	Learning with Disabilities	4	An exploration of how persons with physical, cognitive, and/or sensory disabilities can be accommodated to facilitate productive membership in inclusive school, work and community environments.	GR	LE	Lecture
Spring 2008	LWD740	740	Assistive Technology	LWD	Learning with Disabilities	4	This course provides an understanding of the problems faced by individuals with disability and the variety of assistive technology (AT) solutions currently available to assist these individuals in overcoming these problems. Involved is an understanding of the AT industry and current practices, who the consumer is, and AT involved in general and specific applications.	GR	LE	Lecture
Spring 2008	LWD790	790	Practicum	LWD	Learning with Disabilities	4	This course will provide students with an opportunity to work in the community providing services to individuals who have physical, cognitive and/or learning disabilities. The student will be required to spend a minimum of ten hour per week for the quarter.	GR	LE	Lecture

Spring 2008	M&I220	220	Microbiology-Human Environment	M&I	Microbiology & Immunology	5	Biology of viruses, bacteria, fungi, protozoans, and helminths as related to their natural environments and host-parasite interaction. Introductory course for students in environmental health, nursing, and patient-oriented paramedical health professions. Four hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	M&I220L	220L	Microbio-Human Environment Lab	M&I	Microbiology & Immunology	0	Required laboratory for M&I 220.	UG	LB	Lab
Spring 2008	M&I426	426	Immunology	M&I	Microbiology & Immunology	3	This course covers the principles of basic immunology. Cellular and soluable factors associated with innate and adaptive immunities are included. Functions of phagocytes, natural killer (NK) cells, B cells, and T cells are examined.	UG	LE	Lecture
Spring 2008	M&I427	427	Pathogenic Microbiology	M&I	Microbiology & Immunology	5	Study of microorganisms pathogenic for humans and animals using the organ system approach with emphasis on mechanisms of pathogenesis and host resistance.	UG	LE	Lecture

Spring 2008	M&I431	431	Virology	M&I	Microbiology & Immunology	3	Introduction to the field of virology; plant, animal, and bacterial viruses. Emphasis on the intrinsic properties of viruses and their interaction with cells, multiplication, genetics, and tumor induction.	UG	LE	Lecture
Spring 2008	M&I445	445	Immunobiology	M&I	Microbiology & Immunology	5		UG	LE	Lecture
Spring 2008	M&I499	499	Special Problems-Microbiology	M&I	Microbiology & Immunology	1	Special Problems in Microbiology	UG	LE	Lecture
Spring 2008	M&I634	634	Biological Safety	M&I	Microbiology & Immunology	2	The basic principles and practices of biosafety are examined. This course teaches the identification, handling, and containment of potentially hazardous biological materials, including microorganisms and recombinant DNA.	GR	LE	Lecture

Spring 2008	M&I675	675	Pathogenic Mechanisms	M&I	Microbiology & Immunology	5	(Also listed as BMS 775.) This advanced level course will expand the knowledge of basic microbiology by focusing on human-microbial pathogen interactions. The molecular basis of the pathogenic mechanisms will be emphasized. In addition, the student will gain a better appreciation and understanding of the complexities of interactions between microbes and their human hosts.	GR	LE	Lecture
Spring 2008	M&I699	699	Special Problems-Microbiology	M&I	Microbiology & Immunology	1	Study of the physiological and biochemical processes unique to microorganisms.	GR	LE	Lecture
Spring 2008	M&I726	726	Immunology & Basic Virology	M&I	Microbiology & Immunology	5	(Also listed as BMS 802.) Fundamentals of immunobiology and basic virology. Emphasis on the regulatory and cellular level of host immune responses against microbial pathogens, as well as mechanisms of immunopathology, and on the characteristics and molecular biology of virus pathogens.	GR	LE	Lecture

Spring 2008	M&I727	727	Pathogenic Microbiology	M&I	Microbiology & Immunology	5	(Also listed as BMS 803.) Microorganisms pathogenic for humans and animals using the organ system approach. Emphasis on mechanisms of pathogenesis and host resistance. Includes a project segment devoted to the independent study of the mechanisms of pathogenesis in the host-parasite interactions of the infectious agents used.	GR	LE	Lecture
Spring 2008	M&I731	731	Virology	M&I	Microbiology & Immunology	3	(Also listed as BMS 807.) Introduction to the field of virology with emphasis on animal viruses. Intrinsic properties of viruses and their interaction with cells; multiplication, disease production, genetics, and tumor induction. Projects assigned to each student.	GR	LE	Lecture
Spring 2008	M&I745	745	Immunobiology	M&I	Microbiology & Immunology	5	(Also listed as BMS 812.) Biology of the immune system in terms of current concepts of antibody formation and function. Acquired, delayed, and immediate hypersensitivity are studied with respect to immunological deficiencies, malignancy, tolerance, graft rejection, infection, and acquired resistance.	GR	LE	Lecture

Spring 2008	M&I770	770	Intercellular Communication	M&I	Microbiology & Immunology	4	(Also listed as BMS 805, P&B 776, PHA 740.) Introduces the concepts of intercellular communication through an interdisciplinary presentation of immune neuroendocrine system functions. Emphasizes the similarities between the systems and the multidisciplinary approaches used to study each.	GR	LE	Lecture
Spring 2008	M&I772	772	Mechanisms of Cell Death	M&I	Microbiology & Immunology	3	Signalling and molecular mechanisms of apoptotic cell death and relationship to human disease.	GR	LE	Lecture
Spring 2008	M&I777	777	Gene Therapy	M&I	Microbiology & Immunology	4	(Also listed as BIO 777.) Study of the molecular basis of gene therapy and the use of viral gene delivery systems for the treatment of human disease. Gene therapy strategies are contrasted with various diseases, including cancer and AIDS.	GR	LE	Lecture
Spring 2008	M&I789	789	Continuing Registration	M&I	Microbiology & Immunology	1		GR	LE	Lecture
Spring 2008	M&I800	800	Microbiology Seminar	M&I	Microbiology & Immunology	1	Graded pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	M&I801	801	Seminar: Journal Club	M&I	Microbiology & Immunology	1	Selected topics in microbiology.	GR	SE	Seminar

Spring 2008	M&I831	831	Sem Topics-Molecular Virology	M&I	Microbiology & Immunology	3	(Also listed as BMS 808.) Structure, infectious process, replication, maturation, release, and genetics at the molecular level of the major groups of animal viruses.	GR	SE	Seminar
Spring 2008	M&I833	833	Seminar Topics-Viral Oncology	M&I	Microbiology & Immunology	3	(Also listed as BMS 809.) Understanding the processes involved in cell transformation by oncogenic viruses.	GR	SE	Seminar
Spring 2008	M&I840	840	Special Topics in Immunology	M&I	Microbiology & Immunology	2	(Also listed as BMS 813.) Students select, present, and analyze information from current literature in immunobiology. Seminar/discussion format.	GR	LE	Lecture
Spring 2008	M&I842	842	Sem-Transplantation Immunology	M&I	Microbiology & Immunology	3	Survey of the fundamentals of transplant immunology. Topics include mechanisms of intra- and interspecies rejection, histocompatibility genes and their products, graft-versus-host diseases, immunologically privileged sites, techniques for immuno-suppression, immune tolerance, and the immunobiology of the maternal/fetal relationship.	GR	LE	Lecture
Spring 2008	M&I843	843	Sem Topics-Tumor Immunology	M&I	Microbiology & Immunology	3	The host-tumor relationship is studied intensively. Interrelationships between tumor growth and host immune responses are examined at the molecular and cellular levels.	GR	LE	Lecture

Spring 2008	M&I844	844	Sem Topics - Immune Regulation	M&I	Microbiology & Immunology	3	Maintenance of immune homeostasis with emphasis on the contributions of lymphocyte subpopulations. Sequelae of immune imbalance are studied.	GR	LE	Lecture
Spring 2008	M&I846	846	Sem Tpcs- Infection & Immunity	M&I	Microbiology & Immunology	3	(Also listed as BMS 818.) Focuses on both beneficial and adverse host responses to microbial and metazoan parasites. Effects of infection on immune function are stressed.	GR	LE	Lecture
Spring 2008	M&I851	851	Sem - Reproductive Immunology	M&I	Microbiology & Immunology	3	Immunology as it relates to maternal/fetal interactions. Faculty lectures and student presentations on the fetus as a graft, the passive transfer of immunity to the fetus, pregnancy loss, and infertility. May be taken for letter grade or pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	M&I852	852	Sem Topics- Clinical Immunology	M&I	Microbiology & Immunology	3	Immunology as it relates to disease processes. Faculty lectures and student presentations on hypersensitivity diseases, immune deficiency diseases, immunologic diagnosis of disease, tumor immunology, and immunotherapy. May be taken for letter grade or pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	M&I899	899	Microbiology Research	M&I	Microbiology & Immunology	2	Supervised thesis research.	GR	LL	Lecture/Lab Combination

Spring 2008	MBA510	510	Survey of Accounting	MBA	MBA	4	Introduction to accounting concepts, procedures and practices. Includes analysis of the effect of transactions on financial position, preparation and analysis of financial statements, and use of accounting information to support management decisions.	GR	LE	Lecture
Spring 2008	MBA520	520	Survey of Econ for MBA's	MBA	MBA	4	An introduction to economics. Provides students with modes of reasoning regarding individual and business behavior and enhances student's ability to understand the aggregate economy and how it influences business decisions.	GR	LE	Lecture
Spring 2008	MBA523	523	Survey of Microecon	MBA	MBA	2	An introduction to microeconomics. Provides students with facts, theories, and modes of reasoning regarding individual and business behavior. The course is sharply focused to prepare students to succeed in the MBA program at Wright State.	GR	LE	Lecture
Spring 2008	MBA524	524	Survey of Macroecon	MBA	MBA	2	An introduction to macroeconomics. Enhances the student's ability to understand the aggregate economy and how it influences business decisions. The course is sharply focused to prepare students to succeed in advanced course work in the MBA program.	GR	LE	Lecture

Spring 2008	MBA530	530	Survey of Finance	MBA	MBA	4	Theories, concepts, and techniques of financial management. Designed for student with no previous course work in financial management and for those with a need to review the basic techniques.	GR	LE	Lecture
Spring 2008	MBA580	580	Survey of Quant Bus Analysis	MBA	MBA	4	Survey of quantitative techniques relevant to private and public sector resource allocation, production, and management decision problems, including linear programming, queuing analysis, and decision theory. Emphasis on mathematical modeling and interpretation of solutions.	GR	LE	Lecture
Spring 2008	MBA680	680	Independent Study	MBA	MBA	1		GR	IS	Independent Study
Spring 2008	MBA710	710	Strategic Cost Management	MBA	MBA	4	Application of advanced management accounting concepts to strategic management decisions.	GR	LE	Lecture
Spring 2008	MBA720	720	Analysis Global Economy	MBA	MBA	4	Theories, practices, and patterns of international business and the effect of globalization on the business environment. Interrelationships between interest rates, unemployment, economic growth, inflation, and balance of payments impact on businesses.	GR	LE	Lecture
Spring 2008	MBA728	728	Economics of Innovation	MBA	MBA	4		GR	LE	Lecture

Spring 2008	MBA730	730	Fin Analysis & Dec Making	MBA	MBA	4	Application of finance concepts theories, and techniques of financial management. Emphasis on case problems and decision making.	GR	LE	Lecture
Spring 2008	MBA740	740	Legal/Ethical Dec Making	MBA	MBA	4	Interdisciplinary study of the legal, ethical, and public policy issues in the global environment. Topics include restraints on competition, environmental regulation, product quality, employment, and technology.	GR	LE	Lecture
Spring 2008	MBA750	750	Leading Teams/Organiza	MBA	MBA	4	A hands-on, experience-based course devoted to leading people and teams in today's workplace. Emphasizes communication, conflict resolution, influence strategies, and empowerment principles.	GR	LE	Lecture
Spring 2008	MBA755	755	Competitive Strategy	MBA	MBA	4	Competitive strategy as practiced in organizations from an integrated (cross-functional) perspective. Industries, competition, and other environmental forces are analyzed to determine an organization's competitive strategy. Student team work required.	GR	LE	Lecture

Spring 2008	MBA760	760	Marketing Strategy	MBA	MBA	4	Overview of managing the marketing mix variables and discussion of marketing plans, formation of strategies and problem solving. Material will be covered by readings and discussion of cases. Individual and team exercises will be assigned.	GR	LE	Lecture
Spring 2008	MBA770	770	Info Tech & Bus Trnfrmtn	MBA	MBA	4	Examining the use of IT to improve a firm's operational effectiveness and strategic positioning. Identify and evaluate changes in information and physical flows, cost structures and market forces that IT causes throughout value chain.	GR	LE	Lecture
Spring 2008	MBA780	780	Supply Chain Mgmt	MBA	MBA	4	Explores the fundamentals of supply chain management, including the strategic role of the supply chain, key drivers of supply chain performance, and analytical tools and techniques for supply chain analysis. Cases and in-class exercises.	GR	LE	Lecture
Spring 2008	ME199	199	Funs of Engineering Design	ME	Mechanical and Materials Engr	3	Introduction to the principles and practice of mechanical and materials engineering design. Fundamental design philosophy using a hands-on approach, including topics such as safety, ethics, and product liability. Teamwork and communicated skills are stressed.	UG	LE	Lecture

Spring 2008	ME201	201	Computer-Aided Drafting	ME	Mechanical and Materials Engr	2	Basic techniques of computer-aided engineering drawing. Graphic primitives, drawing, editing, dimensioning, multiple views, hatching, drawing intelligence, and three-dimensional modeling. One hour lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	ME201L	201L	Computer-Aided Drafting Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 201	UG	LB	Lab
Spring 2008	ME202	202	Mech Drawing Solid Modl Design	ME	Mechanical and Materials Engr	4	Basic concepts of engineering drawing with applications to manual and computer-aided drafting: multiview projections; sectional, auxiliary, and pictorial views; dimensioning; and intersections and developments.	UG	LE	Lecture
Spring 2008	ME202L	202L	Engineering Graphics Lab	ME	Mechanical and Materials Engr	0	Reqired laboratory for ME 202.	UG	LB	Lab
Spring 2008	ME212	212	Statics	ME	Mechanical and Materials Engr	4	Forces, resultants, components, equilibrium of particles, equilibrium of rigid bodies, centroids and centers of gravity, analysis of structures, friction, and moments of inertia.	UG	LE	Lecture

Spring 2008	ME213	213	Dynamics	ME	Mechanical and Materials Engr	4	Vector treatment of the kinematics and kinetics of particles and rigid bodies, based on Newton's laws and including work-energy and impulse-momentum techniques.	UG	LE	Lecture
Spring 2008	ME220	220	Manufacturing Process	ME	Mechanical and Materials Engr	3	Fundamentals of manufacturing processes, materials, measurement and quality assurance, casting processes, forming processes, material removal processes, joining processes, and other processes and techniques related to manufacturing.	UG	LE	Lecture
Spring 2008	ME313	313	Strength of Materials	ME	Mechanical and Materials Engr	4	Discusses axial and shear stresses and strains, bi-axial loading, torsion of circular shafts, shear and bending moment diagrams, deflection of beams, and column theory. Four hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	ME313L	313L	Strength of Materials Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 313.	UG	LB	Lab
Spring 2008	ME314	314	Exp. Meas. and Instr.	ME	Mechanical and Materials Engr	4	Techniques, equipment and measurement procedures used by Mechanical Engineers. Writing lab reports, performing data acquisition, and applying statistics to experimental data.	UG	LL	Lecture/Lab Combination

Spring 2008	ME314L	314L	Exp. Meas. and Instr. Lab	ME	Mechanical and Materials Engr	0		UG	LB	Lab
Spring 2008	ME315	315	Thermodynamics I	ME	Mechanical and Materials Engr	4	Classical thermodynamics with applications of the first and second laws to engineering systems.	UG	LE	Lecture
Spring 2008	ME316	316	Thermodynamics II	ME	Mechanical and Materials Engr	4	Concepts of energy, power cycles, refrigeration cycles, gas mixutres, vapor-gas mixtures, and combustion.	UG	LE	Lecture
Spring 2008	ME316L	316L	Thermodynamics II Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 316.	UG	LB	Lab
Spring 2008	ME317	317	Fluid Dynamics	ME	Mechanical and Materials Engr	4	Study of fluid properties, fluid statics, incompressible flows, real fluid flows, and flow measurement.	UG	LE	Lecture
Spring 2008	ME317L	317L	Fluid Dynamics Laboratory	ME	Mechanical and Materials Engr	0	Required laboratory for ME 317.	UG	LB	Lab
Spring 2008	ME318	318	Heat Transfer	ME	Mechanical and Materials Engr	4	Study of the movement of energy due to a temperature difference. The three modes of heat transfer are investigated: conduction, convections and radiation. Detailed look at Heat Equation.	UG	LE	Lecture
Spring 2008	ME318L	318L	Heat Transfer Laboratory	ME	Mechanical and Materials Engr	0	Required laboratory for ME 318.	UG	LB	Lab

Spring 2008	ME360	360	System Dynamics	ME	Mechanical and Materials Engr	4	Introduces students to the system level modeling of dynamic engineering systems including, but not restricted to, linear and rotational mechanical, fluid, thermal, and electrical systems. Modeling of control devices (motors, heaters, pumps) is addressed.	UG	LE	Lecture
Spring 2008	ME370	370	Material Engineering Sci:Intro	ME	Mechanical and Materials Engr	4	Effect of atomic, molecular, and crystalline structure on the properties of materials with emphasis on electronic materials and ceramics; characterization of materials; and device fabrication.	UG	LE	Lecture
Spring 2008	ME371	371	Structure & Prprts-Egr Mtrls	ME	Mechanical and Materials Engr	3	Effect of microstructure, phase equilibrium, and processing on properties of structural materials including metallic alloys, polymers, and composites.	UG	LE	Lecture
Spring 2008	ME375	375	Thermodynamics of Materials	ME	Mechanical and Materials Engr	4	Application of classical thermodynamics to engineering materials. Heats of formation and reaction; behavior of solutions; free energy concepts; thermodynamic fundamentals of phase equilibria.	UG	LE	Lecture

Spring 2008	ME376	376	Physical Metallurgy	ME	Mechanical and Materials Engr	3	Fundamentals of structure property relations in metals and alloys related to transformations and kinetics. Application to recovery and recrystallization, solidification, precipitation strengthening, and displacive transformations.	UG	LE	Lecture
Spring 2008	ME385	385	Metallography Laboratory	ME	Mechanical and Materials Engr	2	Preparation of metallographic specimens; use of the metallurgical microscope including the preparation of photomicrographs.	UG	LB	Lab
Spring 2008	ME386	386	Materials Testing Laboratory	ME	Mechanical and Materials Engr	2	Fundamentals of mechanical testing instrumentation and techniques including the tensile test, hardness tests, effect of heat-treatment on strength, and correlation of microstructure, composition, and properties.	UG	LE	Lecture
Spring 2008	ME405	405	Kinematics & Design-Mechanism	ME	Mechanical and Materials Engr	4	Graphic, analytical, numerical, and symbolic techniques are used in the kinematic and dynamic analysis of machines. Computer-aided design of mechanisms is introduced. Emphasis on the application of these techniques to planar mechanisms.	UG	LE	Lecture
Spring 2008	ME408	408	Design Optimization	ME	Mechanical and Materials Engr	3	Concepts of minima and maxima; linear, dynamic, integer, and nonlinear programming; variational methods. Engineering applications are emphasized.	UG	LE	Lecture

Spring 2008	ME409	409	Aerospace Structures	ME	Mechanical and Materials Engr	4	Stress, deformation, and stability analysis of aerospace structures. Thin-walled members bending, torsion, and shear stresses calculation in multicell structures. Buckling of thin plates.	UG	LE	Lecture
Spring 2008	ME412	412	Finite Element Analysis	ME	Mechanical and Materials Engr	4	Finite element formulations for line, surface, bending, torsion, and three dimensional elements. Numerical methods and application of FEM programs in structural design and solid mechanics.	UG	LE	Lecture
Spring 2008	ME412L	412L	Finite Element Analysis Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 412.	UG	LB	Lab
Spring 2008	ME414	414	Mechanical Design I	ME	Mechanical and Materials Engr	4	Fundamental concepts in design for static strength, fatigue, and impact loading; application to selected mechanical components and systems.	UG	LE	Lecture
Spring 2008	ME415	415	Mechanical Design II	ME	Mechanical and Materials Engr	4	Design of mechanical elements such as springs, bearings, shafts, gears, clutches, brakes, and flywheels. Students conduct an individual design project.	UG	LE	Lecture
Spring 2008	ME417	417	Mechanics of Viscous Fluids	ME	Mechanical and Materials Engr	4	Fundamental equations of viscous flow for laminar and turbulent flows. Boundary layer analysis. Analytical and numerical solutions of the equation of motion.	UG	LE	Lecture

Spring 2008	ME418	418	Heat Conduction Solids	ME	Mechanical and Materials Engr	3	Analytical and numerical techniques for heat conduction problems in one, two, and three dimensions for steady and transient cases. Phase-change problems.	UG	LE	Lecture
Spring 2008	ME423	423	Energy Conversion	ME	Mechanical and Materials Engr	4	Important new developments in energy conversion. Thermoelectric, photoelectric, thermionic, and electromechanical systems are studied.	UG	LE	Lecture
Spring 2008	ME424	424	Solar Engineering	ME	Mechanical and Materials Engr	4	Fundamentals of solar radiation and how it can be utilized as an energy source. Flat plate collectors, concentrating collectors, solar hot water heating, photovoltaics and thermal energy storage will be discussed.	UG	LE	Lecture
Spring 2008	ME430	430	Aeronautics	ME	Mechanical and Materials Engr	4	Aviation history. Standard atmosphere, basic aerodynamics, theory of lift, airplane performance, principles of stability and control, and astronautics and propulsion concepts.	UG	LE	Lecture
Spring 2008	ME431	431	Aerospace Propulsion	ME	Mechanical and Materials Engr	4	Engine cycle analysis; combustion fundamentals; reciprocating engines, propellers; applications to turbojet, turbofan, turboprop, ramjet, SCRAM jet, and rocket engines.	UG	LE	Lecture

Spring 2008	ME432	432	Flight Control Systems	ME	Mechanical and Materials Engr	4	Development of the equations for general aircraft motion. Perturbed state equations. Basic aerodynamic characteristics, control surface effectiveness, stability and control derivatives. Dynamic stability and control of the airplane. Automatic flight control.	UG	LE	Lecture
Spring 2008	ME433	433	Compressible Flow	ME	Mechanical and Materials Engr	4	Fundamentals of gas flow in the subsonic to supersonic flow regimes. Wave propagation in compressible medium, one-dimensional isentropic flow with area change, frictional effects, heat transfer effects and two dimensional waves.	UG	LE	Lecture
Spring 2008	ME434	434	Computational Fluid Dynamics	ME	Mechanical and Materials Engr	4	Introduction to CFD methods; governing equations, PDEs, finite difference numerical methods, stability analysis, incompressible and compressible flows, subsonic to supersonic flows.	UG	LE	Lecture
Spring 2008	ME442	442	Vehicle Engineering	ME	Mechanical and Materials Engr	3	Develops students abilities to derive and solve vehicle equations and introduces how dynamic analysis is used in vehicle design. Various performance criteria, control concepts, and HEVs will be studied.	UG	LE	Lecture

Spring 2008	ME444	444	Prn-Internal Combustion Engine	ME	Mechanical and Materials Engr	4	Thermodynamics of I.C. engines, combustion thermodynamics, friction, heat and mass losses, and computer control of the modern fuel-injected I.C. engine.	UG	LE	Lecture
Spring 2008	ME456	456	Introduction to Robotics	ME	Mechanical and Materials Engr	4	Introduction to the mathematics, programming, and control of robots. Topics include coordinate systems and transformations, manipulator kinematics and inverse kinematics, trajectory planning, jacobians and control.	UG	LE	Lecture
Spring 2008	ME456L	456L	Introduction to Robotics Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 456.	UG	LB	Lab
Spring 2008	ME458	458	Instrumentation & Measurement	ME	Mechanical and Materials Engr	4	Develops understanding in measurements, conveys the principles and practice for design of systems including uncertainty and signal reconstruction, and establishes the physical principles and techniques used to measure those quantities most important for applications.	UG	LE	Lecture

Spring 2008	ME460	460	Mechanical Vibrations	ME	Mechanical and Materials Engr	4	Modeling and analysis of single and multi-degree of freedom systems under free and forced vibration and impact, Lagrangian and matrix formulations, energy methods, and introduction to random vibrations.	UG	LE	Lecture
Spring 2008	ME460L	460L	Mechanical Vibrations Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 460.	UG	LB	Lab
Spring 2008	ME464	464	Mechanical Sys Mdlng & Design	ME	Mechanical and Materials Engr	4	This course will teach students how to model complex mechanical systems as a set of simple, linear or nonlinear components for the purpose of design. Students will be introduced to modern computational tools.	UG	LE	Lecture
Spring 2008	ME470	470	Failure Analysis	ME	Mechanical and Materials Engr	4	Engineering aspects of failure analysis, failure mechanisms and related environmental factors, and analysis of actual service failure.	UG	LE	Lecture
Spring 2008	ME471	471	Nondestructive Evaluation	ME	Mechanical and Materials Engr	4	Lectures will cover: Principles and applications of Eddy Current techniques, Wave Propagation in guided wave modes, Ultrasonics, Acoustic Emission, Radiography, Modeling and Analysis, Introduction to signal processing and Specifications and Standards.	UG	LE	Lecture

Spring 2008	ME472	472	Strctre & Prprts-Engr Polymers	ME	Mechanical and Materials Engr	4	This course introduces polymers as engineering materials and covers fundamental concepts in polymer science and engineering. This includes polymerization processes morphology and crystallinity, thermal transitions, viscoelasticty, rubber elasticity, aging and contemporary issues in polymers.	UG	LE	Lecture
Spring 2008	ME474	474	Mat Sel for Mech Design	ME	Mechanical and Materials Engr	4	Principles of materials-limited design. Lectures, case histories, open-ended assignments and computer based materials selection tools. Procedures for selection of optimum material(s) under constraints resulting from functional, reliability, safety, cost and environmental issues.	UG	LE	Lecture
Spring 2008	ME475	475	High Temperature Materials	ME	Mechanical and Materials Engr	3	The design and use of high temperature superalloys, strengthening mechanisms, creep and fatigue, corrosion and oxidation, protective coatings, and alternative materials.	UG	LE	Lecture
Spring 2008	ME477	477	Mechanical Behavior-Materials	ME	Mechanical and Materials Engr	4	Crystal plasticity and single crystal behavior. Introduction to dislocation theory. Strengthening mechanisms and polycrystalline behavior. Introduction to viscoelasticity. Fracture, fatigue, and creep of materials.	UG	LE	Lecture

Spring 2008	ME478	478	X-Ray Spectral Analysis	ME	Mechanical and Materials Engr	3	(Also listed as GL 474.) Electron microprobe and X-ray fluorescence for analysis of alloys and other materials explained and demonstrated on examples. Two hours lecture, one hour lab.	UG	LE	Lecture
Spring 2008	ME478L	478L	X-Ray Spectral Analysis Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 478.	UG	LE	Lecture
Spring 2008	ME479	479	Materials Composition	ME	Mechanical and Materials Engr	4	(Also listed as CHM 479.) Survey of principles of corrosion processes with application to metallic and nonmetallic materials. Principles of electro-chemistry are included.	UG	LE	Lecture
Spring 2008	ME480	480	X-Ray Methods in Material Sci	ME	Mechanical and Materials Engr	4	Introduction to the theory and practice of diffraction methods in the study of alloys, refractory materials, and polymers. Two hours lecture, four hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	ME481	481	Materials Characterization	ME	Mechanical and Materials Engr	4	Principles of characterization of materials based on particle and wave taxonomies integrated with sensor methods and principles.	UG	LE	Lecture
Spring 2008	ME482	482	Intro-Transmission Electron Mi	ME	Mechanical and Materials Engr	4	Principles that govern image formation and electron diffraction of crystalline materials, laboratory demonstrations and experiments to illustrate the principles. Three hours lecture, one hour lab.	UG	LL	Lecture/Lab Combination

Spring 2008	ME483	483	Introduction to Ceramics	ME	Mechanical and Materials Engr	3	Ceramic and refractory raw materials and products; atomic structure and bonding; structure of crystalline phases and glasses; structural imperfections; diffusion in oxides; phase equilibria; and processing of ceramics.	UG	LE	Lecture
Spring 2008	ME484	484	Physical Ceramics	ME	Mechanical and Materials Engr	4	Processing, microstructure, and properties of ceramics; defect equilibria in oxides; thermal, optical, electrical, and mechanical properties of ceramic materials; ceramics for special applications. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	ME484L	484L	Physical Ceramics Laboratory	ME	Mechanical and Materials Engr	0	Required laboratory for ME 484.	UG	LB	Lab
Spring 2008	ME485	485	Solidification Processing	ME	Mechanical and Materials Engr	4	Fundamentals of melt solidification, application to metals casting technology, and an introduction to powder metallurgy. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	ME485L	485L	Solidification Processing Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 485.	UG	LB	Lab

Spring 2008	ME486	486	Deformation Processing	ME	Mechanical and Materials Engr	4	Fundamentals of principal deformation processing systems including forging, extrusion, rolling, and sheet forming; material response and formability; and mechanics and analysis of selected processes. Three hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	ME487	487	Machining	ME	Mechanical and Materials Engr	4	Fundamentals of machining with an emphasis on engineering models of machinability, chip formation, cutting forces and power, and lubrication. Introduction to numerical control machining. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	ME487L	487L	Machining Laboratory	ME	Mechanical and Materials Engr	0	Required laboratory for ME 487.	UG	LB	Lab
Spring 2008	ME488	488	Powder Processing Materials	ME	Mechanical and Materials Engr	4	Fundamental metallurgy and ceramic science of powder processing techniques. Details of current powder processing technology and methods. Hands-on laboratory experience with both metal and ceramic materials. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	ME488L	488L	Powder Processing Laboratory	ME	Mechanical and Materials Engr	0	Required laboratory for ME 488.	UG	LB	Lab

Spring 2008	ME489	489	Engineering Plastics	ME	Mechanical and Materials Engr	4	(Also listed as CHM 469.) Properties and manufacturing processes of engineering plastics and effect of these factors on plastics design. Illustrative laboratory projects included. Two hours lecture, four hours lab.	UG	LE	Lecture
Spring 2008	ME489L	489L	Engineering Plastics Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 489.	UG	LB	Lab
Spring 2008	ME490	490	Engineering Design I	ME	Mechanical and Materials Engr	4	Independent investigation of contemporary engineering problems under the guidance of an instructor. Topics selected to meet the needs and interests of students. Research of professional literature and submission of an engineering report required. Two hours lecture, two hours lab, one hour recitation.	UG	LE	Lecture
Spring 2008	ME490L	490L	Engineering Design I Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 490.	UG	LB	Lab
Spring 2008	ME490R	490R	Engineering Design I Rec	ME	Mechanical and Materials Engr	0	required recitation for ME 490.	UG	RE	Recitation
Spring 2008	ME490W	490W	Writing in ME 490	ME	Mechanical and Materials Engr	0	Required writing component for ME 490.	UG	LB	Lab

Spring 2008	ME491	491	Engineering Design II	ME	Mechanical and Materials Engr	4	Independent investigation of contemporary engineering problems under the guidance of an instructor. Topics selected to meet the needs and interests of students. Research of professional literature and submission of an engineering report required. Two hours lecture, two hours lab, one hour recitation.	UG	LE	Lecture
Spring 2008	ME491L	491L	Engineering Design II Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 491.	UG	LB	Lab
Spring 2008	ME491R	491R	Engineering Design II Rec	ME	Mechanical and Materials Engr	0	Required recitation for ME 491.	UG	RE	Recitation
Spring 2008	ME491W	491W	Writing in ME 491	ME	Mechanical and Materials Engr	0		UG	LB	Lab
Spring 2008	ME492	492	Materials Engineering Design	ME	Mechanical and Materials Engr	4	Fundamentals of mechanical drawing, computer-aided design (CAD) and solid modeling using modern commercial software. Course culminates in the design and fabrication of an actual prototype part.	UG	LE	Lecture
Spring 2008	ME492L	492L	Materials Engineering Dsgn Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 492.	UG	LB	Lab

Spring 2008	ME492W	492W	Writing in ME 492	ME	Mechanical and Materials Engr	0	Required writing component for ME 492.	UG	LB	Lab
Spring 2008	ME493	493	Materials Engineering Dsgn II	ME	Mechanical and Materials Engr	4	Independent investigation of a contemporary problem in materials science and engineering under faculty guidance. Project design and reporting are emphasized along with analysis, synthesis, and testing.	UG	LL	Lecture/Lab Combination
Spring 2008	ME493W	493W	Writing in ME 493	ME	Mechanical and Materials Engr	0		UG	LB	Lab
Spring 2008	ME495	495	Thermal-Fluid Lab	ME	Mechanical and Materials Engr	2	Experiments in thermodynamics, fluid dynamics and heat transfer will be performed. Lab reports will be written.	UG	LB	Lab
Spring 2008	ME496	496	Eng. Mechanics Lab	ME	Mechanical and Materials Engr	2	Introduction to experimental procedures and measurement techniques used in modern experimental mechanics. Builds on prerequisite classroom theory in mechanics of materials, engineering measurements and system dynamics.	UG	LB	Lab

Spring 2008	ME497	497	Materials Lab I	ME	Mechanical and Materials Engr	2	Experimental methods related to the microstructural analysis of materials. Optical microscopy, scanning electron microscopy, sample preparation methods. Microstructural evolution and hardness as a function of mechanical processing and hear treatment.	UG	LB	Lab
Spring 2008	ME499	499	Special Problems-Mech & Egr	ME	Mechanical and Materials Engr	1	Special problems in advanced engineering topics. Topics vary.	UG	IS	Independent Study
Spring 2008	ME499	499	Special Problems-Mech & Egr	ME	Mechanical and Materials Engr	1	Special problems in advanced engineering topics. Topics vary.	UG	LL	Lecture/Lab Combination
Spring 2008	ME513	513	Strength of Materials	ME	Mechanical and Materials Engr	4	Axial and shear stresses and strains; biaxial loading; torsion of circular shafts; shear and bending moment diagrams; deflection of beams; and column theory. 4 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	ME513L	513L	Strength of Materials Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 513.	GR	LB	Lab
Spring 2008	ME514	514	Exp. Meas. and Instr.	ME	Mechanical and Materials Engr	4	Techniques, equipment and measurement procedures used by Mechanical Engineers. Writing lab reports, performing data aquisition, and applying statistics to experimental data.	GR	LL	Lecture/Lab Combination

Spring 2008	ME514L	514L	Exp. Meas. and Instr. Lab	ME	Mechanical and Materials Engr	0		GR	LB	Lab
Spring 2008	ME515	515	Thermodynamics I	ME	Mechanical and Materials Engr	4	Classical thermodynamics which focuses on thermodynamic properties of fluids, conservation of mass, conservation of energy, and the second law of thermodynamics. These principles are applied to engineering problems.	GR	LE	Lecture
Spring 2008	ME516	516	Thermodynamics II	ME	Mechanical and Materials Engr	4	Concepts of energy, power cycles, refrigeration cycles, gas mixtures, vapor-gas-mixtures, and combustion.	GR	LE	Lecture
Spring 2008	ME516L	516L	Thermodynamics II Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 516.	GR	LB	Lab
Spring 2008	ME517	517	Fluid Dynamics	ME	Mechanical and Materials Engr	4	Study of fluid properties, fluid statics, incompressible flows, real fluid flows, and flow measurement.	GR	LE	Lecture
Spring 2008	ME517L	517L	Fluid Dynamics Laboratory	ME	Mechanical and Materials Engr	0	Required laboratory for ME 517.	GR	LB	Lab
Spring 2008	ME518	518	Heat Transfer	ME	Mechanical and Materials Engr	4	Study of the movement of energy due to a temperature difference. The three modes of heat transfer are investigated: conduction, convections, and radiation. Detailed look at Heat Equation.	GR	LE	Lecture

Spring 2008	ME518L	518L	Heat Transfer Laboratory	ME	Mechanical and Materials Engr	0	Required laboratory for ME 518.	GR	LB	Lab
Spring 2008	ME570	570	Materials Egr Science:Intro	ME	Mechanical and Materials Engr	4	Effect of atomic, molecular, and crystalline structures on the properties of materials with emphasis on electronic materials and ceramics, characterization of materials, and device fabrication.	GR	LE	Lecture
Spring 2008	ME571	571	Structure & Prprts-Egr Mtrls	ME	Mechanical and Materials Engr	3	Effect of microstructure, phase equilibrium, and processing on properties of structural materials including metallic alloys, polymers, and composites.	GR	LE	Lecture
Spring 2008	ME575	575	Thermodynamics of Materials	ME	Mechanical and Materials Engr	4	Application of classical thermodynamics to engineering materials. Heats of formation and reaction; behavior of solutions; free energy concepts; thermodynamic fundamentals of phase equilibria.	GR	LE	Lecture
Spring 2008	ME576	576	Physical Metallurgy	ME	Mechanical and Materials Engr	3	Fundamentals of structure property relations in metals and alloys related to transformations and kinetics. Application to recovery and recrystallization, solidification, precipitation strengthening, and displacive transformations.	GR	LE	Lecture

Spring 2008	ME585	585	Metallography Laboratory	ME	Mechanical and Materials Engr	2	Preparation of metallographic specimens; use of the metallurgical microscope including the preparation of photomicrographs.	GR	LB	Lab
Spring 2008	ME586	586	Materials Testing Laboratory	ME	Mechanical and Materials Engr	2	Fundamentals of mechanical testing instrumentation and techniques, including the tensile test, hardness tests, effect of heat-treatment on strength, and correlation of microstructure, composition, and properties.	GR	LB	Lab
Spring 2008	ME605	605	Kinematics & Design-Mechanisms	ME	Mechanical and Materials Engr	4	Graphic, analytical, numerical, and symbolic techniques are used in the kinematic and dynamic analysis of machines. Computer-aided design of mechanisms is introduced. Emphasis on the application of these techniques to planar mechanisms.	GR	LE	Lecture
Spring 2008	ME608	608	Design Oprimization	ME	Mechanical and Materials Engr	3	Graphic, analytical, numerical, and symbolic techniques are used in the kinematic and dynamic analysis of machines. Computer-aided design of mechanisms is introduced. Emphasis on the application of these techniques to planar mechanisms.	GR	LE	Lecture

Spring 2008	ME609	609	Aerospace Structures	ME	Mechanical and Materials Engr	4	Analysis and design of flight structures. Stress, deformation, and stability analysis of aerospace structures. Thin-walled members bending, torsion, and shear stresses calculation in multi-cell structures. Buckling of thin plates.	GR	LE	Lecture
Spring 2008	ME612	612	Finite Element Analysis	ME	Mechanical and Materials Engr	4	Finite element formulations for line, surface, bending, torsion, and three-dimensional elements. Numerical methods and applications of FEM programs in structural design and solid mechanics.	GR	LE	Lecture
Spring 2008	ME612L	612L	Finite Element Analysis Lab	ME	Mechanical and Materials Engr	0	Finite element formulations for line, surface, bending, torsion, and three-dimensional elements. Numerical methods and applications of FEM programs in structural design and solid mechanics.	GR	LB	Lab
Spring 2008	ME614	614	Mechanical Design I	ME	Mechanical and Materials Engr	4	Fundamental concepts in design for static strength, fatigue, and impact loading; application to selected mechanical components and systems.	GR	LE	Lecture
Spring 2008	ME615	615	Mechanical Design II	ME	Mechanical and Materials Engr	4	Design of mechanical elements such as springs, bearings, shafts, gears, clutches, brakes, and flywheels; students conduct an individual design project.	GR	LE	Lecture

Spring 2008	ME617	617	Mechanics of Viscous Fluids	ME	Mechanical and Materials Engr	4	Fundamental equations of viscous flow for laminar and turbulent flows. Boundary layer analysis. Analytical and numerical solutions of the equation of motion.	GR	LE	Lecture
Spring 2008	ME618	618	Heat Conduction in Solids	ME	Mechanical and Materials Engr	3	Analytical and numerical techniques for heat conduction problems in one, two, and three dimensions for steady and transient cases. Phase-change problems.	GR	LE	Lecture
Spring 2008	ME623	623	Energy Conversion	ME	Mechanical and Materials Engr	4	This course will study the fundamentals of energy and energy conversion, our energy resources, direct energy conversion, heat to work energy conversion, fossil fuel energy conversion, and alternative energy conversion.	GR	LE	Lecture
Spring 2008	ME624	624	Solar Engineering	ME	Mechanical and Materials Engr	4	Fundamentals of solar radiation and how it can be utilized as an energy source. Flat plate collectors, concentrating collectors, solar hot water heating, photovoltaics and thermal energy storage will be discussed.	GR	LE	Lecture
Spring 2008	ME630	630	Aeronautics	ME	Mechanical and Materials Engr	4	Aviation history. Standard atmosphere, basic aerodynamics, theory of lift, airplane performance, principles of stability and control, astronautics, and propulsion concepts.	GR	LE	Lecture

Spring 2008	ME631	631	Aerospace Propulsion	ME	Mechanical and Materials Engr	4	Engine cycle analysis; combustion fundamentals; reciprocating engines and propellers; applications to turbojet, turbofan, turboprop, ramjet, SCRAM jet, and rocket engines.	GR	LE	Lecture
Spring 2008	ME632	632	Flight Dynamics & Control Sys	ME	Mechanical and Materials Engr	4	Covers development of the equations for general aircraft motion; Perturbed State equations; basic aerodynamic characteristics; control surface effectiveness; stability and control derivatives; dynamic stability; control of the airplane; and automatic flight control.	GR	LE	Lecture
Spring 2008	ME633	633	Compressible Flow	ME	Mechanical and Materials Engr	4	Fundamentals of gas flow in the subsonic to supersonic flow regimes. Wave propagation in compressible medium, one-dimensional isentropic flow with area change, frictional effects, heat transfer effects and two-dimensional waves.	GR	LE	Lecture
Spring 2008	ME634	634	Computational Fluid Dynamics	ME	Mechanical and Materials Engr	4	Introduces CFD methods: governing equations, PDEs, finite difference numerical methods, stability analysis, incompressible and compressible flows, subsonic to supersonic flows.	GR	LE	Lecture

Spring 2008	ME642	642	Vehicle Engineering	ME	Mechanical and Materials Engr	3	Develops students' abilities to derive and solve vehicle equations, and introduce dynamic analysis in vehicle design. Various performance criteria, control concepts, and HEVs will be studied.	GR	LE	Lecture
Spring 2008	ME644	644	Prn Internal Combustion Engine	ME	Mechanical and Materials Engr	4	Thermodynamics of I.C. engines, combustion thermodynamics, friction, heat and mass losses, and computer control of the modern fuel-injected I.C. engine.	GR	LE	Lecture
Spring 2008	ME656	656	Introduction to Roboctics	ME	Mechanical and Materials Engr	4	(Also listed as CEG 656 and EE 656.) Introduction to the mathematics, programming, and control of robots. Topics covered include coordinate systems and transformations, manipulator kinematics and inverse kinematics, trajectory planning, Jacobians, and control.	GR	LE	Lecture
Spring 2008	ME656L	656L	Introduction to Robotics Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 656.	GR	LB	Lab

Spring 2008	ME658	658	Instrumentation & Measurement	ME	Mechanical and Materials Engr	4	Develops understanding in measurements, conveys the principles and practice for design of systems including uncertainty and signal reconstruction, and establishes the physical principles and techniques used to measure those quantities most important for applications.	GR	LE	Lecture
Spring 2008	ME660	660	Mechanical Vibrations	ME	Mechanical and Materials Engr	4	Modeling and analysis of single and multi-degree freedom systems under free and forced vibration and impact. Lagrangian and matrix formulations, energy methods, and introduction to random vibrations.	GR	LE	Lecture
Spring 2008	ME660L	660L	Mechanical Vibrations Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 660.	GR	LB	Lab
Spring 2008	ME664	664	Mech Sys Modeling & Design	ME	Mechanical and Materials Engr	4	Modeling of complex mechanical systems as a set of simple, linear or nonlinear components for the purpose of design. Introduces modern computational tools.	GR	LE	Lecture
Spring 2008	ME670	670	Failure Analysis	ME	Mechanical and Materials Engr	4	Engineering aspects of failure analysis, failure mechanisms, and related environmental factors. Analysis of actual service failure.	GR	LE	Lecture

Spring 2008	ME671	671	Non-Destructive Testing	ME	Mechanical and Materials Engr	3	Lectures will cover: Principles and applications of Eddy Current techniques, Wave Propagation in guided wave modes, Ultrasonics, Acoustic Emission, Radiography, Modeling and Analysis, Introduction to signal processing and Specifications and Standards.	GR	LE	Lecture
Spring 2008	ME672	672	Structure & Prprts-Egr Polymer	ME	Mechanical and Materials Engr	4	Introduces polymers as engineering materials and covers fundamental concepts in polymer science and engineering. Includes polymerization processes, morphology and crystallinity, thermal transitions, viscoelasticiity, rubber elasticity, aging, and contemporary issues in polymers.	GR	LE	Lecture
Spring 2008	ME674	674	Mat Sel for Mech Design	ME	Mechanical and Materials Engr	4	Principles of materials-limited design. Lectures, case histories, open-ended assignments and computer based materials selection tools. Procedures for selection of optimum material(s) under constraints resulting from functional, reliability, safety, cost and environmental issues.	GR	LE	Lecture

Spring 2008	ME675	675	High Temperature Materials	ME	Mechanical and Materials Engr	3	Design and use of high-temperature superalloys, strengthening mechanisms, creep and fatigue, corrosion and oxidation, protective coatings, and alternative materials.	GR	LE	Lecture
Spring 2008	ME677	677	Mechanical Behavior-Materials	ME	Mechanical and Materials Engr	4	Crystal plasticity and single crystal behavior. Introduction to dislocation theory. Strengthening mechanisms and polycrystalline behavior. Introduction to viscoelasticity. Fracture, fatigue, and creep of materials.	GR	LE	Lecture
Spring 2008	ME678	678	X-Ray Spectral Analysis	ME	Mechanical and Materials Engr	3	Electron microprobe and X-ray fluorescence for analysis of alloys and other materials are explained and demonstrated with examples. 2 hours lecture, 1 hour lab.	GR	LE	Lecture
Spring 2008	ME678L	678L	X-Ray Spectral Analysis Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 678.	GR	LB	Lab
Spring 2008	ME679	679	Materials Corrosion	ME	Mechanical and Materials Engr	4	Survey of the principles of corrosion processes with application to metallic and nonmetallic materials. Principles of electrochemistry are included.	GR	LE	Lecture
Spring 2008	ME680	680	X-Ray Methods in Materials Sci	ME	Mechanical and Materials Engr	4	Introduction to the theory and practice of diffraction methods in the study of alloys, refractory materials, and polymers. 2 hours lecture, 4 hours lab.	GR	LL	Lecture/Lab Combination

Spring 2008	ME681	681	Materials Characterization	ME	Mechanical and Materials Engr	4	Survey of the principal techniques used to detect and evaluate flaws in material components such as castings, weldments, and composites. Includes liquid penetrant, ultrasonic, radiographic, eddy current, and magnetic test methods.	GR	LE	Lecture
Spring 2008	ME682	682	Intro-Trnsmssn Electron Micros	ME	Mechanical and Materials Engr	4	Introduction to the theory and practice of diffraction methods in the study of alloys, refractory materials, and polymers. 2 hours lecture, 4 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	ME683	683	Introduction to Ceramics	ME	Mechanical and Materials Engr	3	Ceramic and refractory raw materials and products; atomic structure and bonding; structure of crystalline phases and glasses; structural imperfections; diffusion in oxides; phase equilibria; processing of ceramics.	GR	LE	Lecture
Spring 2008	ME684	684	Physical Ceramics	ME	Mechanical and Materials Engr	4	Processing, microstructure, and properties of ceramics; defect equilibria in oxides; thermal, optical, electrical, and mechanical properties of ceramic materials. Ceramics for special applications. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	ME684L	684L	Physical Ceramics Laboratory	ME	Mechanical and Materials Engr	0	Required laboratory for ME 684.	GR	LB	Lab

Spring 2008	ME685	685	Solidification Processing	ME	Mechanical and Materials Engr	4	Fundamentals of melt solidification, application to metals casting technology, and an introduction to powder metallurgy. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	ME685L	685L	Solidification Processing Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 685.	GR	LB	Lab
Spring 2008	ME686	686	Deformation Processing	ME	Mechanical and Materials Engr	4	Fundamentals of principal deformation processing systems including forging, extrusion, rolling, and sheet forming; material response and formability; and mechanics and analysis of selected processes. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	ME687	687	Machining	ME	Mechanical and Materials Engr	4	Fundamentals of machining with emphasis on engineering models of machinability, chip formation, cutting forces and power, and lubrication. Introduction to numerical control machining. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	ME687L	687L	Machining Laboratory	ME	Mechanical and Materials Engr	0	required laboratory for ME 687.	GR	LB	Lab

Spring 2008	ME688	688	Powder Process-Materials Lab	ME	Mechanical and Materials Engr	4	Fundamental metallurgy and ceramic science of powder processing techniques. Details of current powder processing technology and methods. Hands-on laboratory experience with both metal and ceramic materials.	GR	LE	Lecture
Spring 2008	ME688L	688L	Powder Processing Laboratory	ME	Mechanical and Materials Engr	0	Fundamental metallurgy and ceramic science of powder processing techniques. Details of current powder processing technology and methods. Hands-on laboratory experience with both metal and ceramic materials.	GR	LB	Lab
Spring 2008	ME689	689	Egr Plastics:Mtrls, Proc & Dsgn	ME	Mechanical and Materials Engr	4	(Also listed as CHM 669.) Properties and manufacturing processes of engineering plastics and the effect of these factors on plastics design. Illustrative laboratory projects are included. 2 hours lecture, 4 hours lab.	GR	LE	Lecture
Spring 2008	ME689L	689L	Engineering Plastics Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 689.	GR	LB	Lab
Spring 2008	ME699	699	Special Problems in ME	ME	Mechanical and Materials Engr	1	Special problems in advanced engineering topics. Titles vary.	GR	IS	Independent Study
Spring 2008	ME700	700	Prin of Instruction in Egr	ME	Mechanical and Materials Engr	3	Survey of available instructional materials and discussion of educational theories and techniques leading to more effective instruction.	GR	LE	Lecture

Spring 2008	ME708	708	Multidisciplinary Strctrl Optm	ME	Mechanical and Materials Engr	4	Structural optimization of large scale systems with constraint approximations, sensitivity analysis, and design variable linking methods. Primal, dual, and optimality criteria methods for shape and size optimization, 3 hour lecture.	GR	LL	Lecture/Lab Combination
Spring 2008	ME710	710	Comp Mthds Strctrl Dynamics	ME	Mechanical and Materials Engr	4	Vibration of discrete and continuous systems. Computational methods for the eigenvalue problem. Large-dimensional systems. Approximate methods for continuous systems. Substructure synthesis. Response of vibrating systems. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	ME712	712	Finite Element Method Appl	ME	Mechanical and Materials Engr	4	Concepts of dynamic analysis using the finite element method (FEM). Application of various computational techniques to dynamic structures and thermal systems including vehicle dynamics. 3 hours lecture, 2 hours lab.	GR	LE	Lecture
Spring 2008	ME712L	712L	Finite Element Method Appl Lab	ME	Mechanical and Materials Engr	0	Required laboratory for ME 712.	GR	LB	Lab

Spring 2008	ME714	714	Nonlinear Finite Elmt Analysis	ME	Mechanical and Materials Engr	4	Nonlinear finite element analysis of elastic, plastic, and viscoplastic deformation. Flow formulation and solid formulation. Analysis and simulation of structures and metal forming processes.	GR	LE	Lecture
Spring 2008	ME715	715	Advanced Dynamics	ME	Mechanical and Materials Engr	4	Introduction to classical mechanics. Application of distributed and discretized approaches to dynamic systems with rigid and deformable members. Emphasis on the understanding of fundamental theory of mechanics and applications of different techniques to dynamics.	GR	LE	Lecture
Spring 2008	ME716	716	Nonlinear Dynamics & Vibration	ME	Mechanical and Materials Engr	4	The behavior of nonlinear mechanical systems is analyzed with numerical, symbolic, graphic, and analytical methods. Equal emphasis is placed on understanding nonlinear effects and methods of analysis.	GR	LE	Lecture
Spring 2008	ME718	718	Radom Vibration	ME	Mechanical and Materials Engr	4	Introduction of the fundamental concepts of random signal analysis for random vibration analysis. Statistical approaches to the response of mechanical vibratory systems, and the extension of this understanding to experimental modal analysis.	GR	LL	Lecture/Lab Combination

Spring 2008	ME719	719	Vibe Test & Hlth Mon	ME	Mechanical and Materials Engr	4	Advanced theoretical and practical aspects of vibration testing including: signal analysis, windowing, transducers, exciters, modal identification techniques, rotor dynamics, and machine health monitoring. Includes extensive independent lab study.	GR	LL	Lecture/Lab Combination
Spring 2008	ME720	720	Advanced Mechanics of Solids	ME	Mechanical and Materials Engr	4	Introduces theory of elasticity. Topics in advanced strength of materials. Energy methods. Computational techniques in solid mechanics. Introduces plates and shells.	GR	LE	Lecture
Spring 2008	ME721	721	Mechanics-Composite Materials	ME	Mechanical and Materials Engr	4	Constituent properties and micromechanics of composite materials are studied. Macromechanics of fiber reinforced composites and laminates are discussed and a brief introduction to finite element analysis of composites is presented.	GR	LE	Lecture
Spring 2008	ME722	722	Aeroelasticity	ME	Mechanical and Materials Engr	4	Static and dynamic aeroelastic response of an aeroelastic airfoil and a straight wing in the presence of steady and unsteady aerodynamic loads. Use of the K and PK to determine flutter speeds. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination

Spring 2008	ME723	723	Viscoelasticity	ME	Mechanical and Materials Engr	4	Extends the concepts of elasticity to include the energy dissipating effects of viscoelasticity. Linear/nonlinear viscoelastic behavior are examined in one and three dimensions. Finite element modeling of frequency dependent viscoelastic behavior is introduced.	GR	LE	Lecture
Spring 2008	ME724	724	Continuum Mechanics	ME	Mechanical and Materials Engr	4	Applying the physical laws of conservation of mass, energy, momentum, and thermo-dynamics to a continuum to formulate the mathematical equations governing the macroscopic behavior of matter. Under-standing the physical meaning of the laws and individual terms in the equations, analysis of stress and deformation at a point, and the development of constitutive equations will be emphasized.	GR	LE	Lecture
Spring 2008	ME726	726	Structural Reliability	ME	Mechanical and Materials Engr	4	Analyze the uncertainties associated with mechanical and structural design. Methods to model various uncertainties in a design using probabilistic analysis tools. Computation of safety index and structural reliability using efficient techniques for implicit functions.	GR	LE	Lecture

Spring 2008	ME730	730	Advanced Fluid Dynamics	ME	Mechanical and Materials Engr	3	Theory and application of conservation equations for fluid mechanics. Develops boundary layer equations for laminar and turbulent flows. Topics include incompressible, viscous, supersonic, and hypersonic flows.	GR	LE	Lecture
Spring 2008	ME732	732	Boundary Layer Theory	ME	Mechanical and Materials Engr	4	Advanced fluid dynamics including formulation of the Navier Stoke equations, boundary layers and exact and approximate solution of the boundary layer equations, and the transition to and characteristics of turbulent flows.	GR	LE	Lecture
Spring 2008	ME734	734	Adv Computatnl Fluid Dynamics	ME	Mechanical and Materials Engr	4	Introduction to modern computational fluid dynamic (CFD) methods. Survey of current numerical procedures to solve fluid dynamic problems from incompressible to hypersonic flows. 3 hours lecture, 2 hours lab.	GR	LL	Lecture/Lab Combination
Spring 2008	ME736	736	Convective Heat & Mass Trnsfr	ME	Mechanical and Materials Engr	4	Heat and mass transfer analysis within conductors and over submerged objects for laminar and turbulent flows. Film condensation and boiling.	GR	LE	Lecture

Spring 2008	ME738	738	Radiation Heat Transfer	ME	Mechanical and Materials Engr	3	Fundamentals and application of radiation heat transfer, radiation between gray and nongray bodies, network techniques, radiation through absorbing media, and radiation between gases and surrounding surfaces. Finite difference solution for radiation problem.	GR	LE	Lecture
Spring 2008	ME740	740	Two-Phase Heat Transfer	ME	Mechanical and Materials Engr	4	Examination of the thermophysics of vaporization and condensation processes in heat transfer equipment. The basic physical mechanisms associated with phase-change phenomena are described, and the best empirical models are presented.	GR	LE	Lecture
Spring 2008	ME742	742	Num Smltn-Heat/Mass Trnsfr	ME	Mechanical and Materials Engr	3	Computational techniques for the solution of engineering problems in multidimensional fluid flow, and heat and mass transfer including two-phase flows and chemical reactions.	GR	LE	Lecture
Spring 2008	ME744	744	Advanced Thermodynamics	ME	Mechanical and Materials Engr	4	Thermodynamics is studied from both the classical (macroscopic) and statistical (microscopic) viewpoints with emphasis on statistical thermodynamics. Property relationships, Maxwell relations, partition functions, distribution functions, kinetic theory and the Boltzmann transport equation are discussed.	GR	LE	Lecture

Spring 2008	ME746	746	Hypersonic Flows	ME	Mechanical and Materials Engr	4	Hypersonic flow is studied from the viewpoint of its unique fluid dynamic attributes with emphasis on classic inviscid theories, chemical kinetics, and state-of-the-art development.	GR	LE	Lecture
Spring 2008	ME748	748	Fundamentals of Plasma Science	ME	Mechanical and Materials Engr	4	Properties, characteristics, and use of ionized gases. Fundamentals of gaseous electronics including kinetic theory, excitation, ionization, equilibrium, non-equilibrium, and local thermodynamic equilibrium. Plasma generation, glow discharge, rf-discharges, plasma torches, and free-burning arcs.	GR	LE	Lecture
Spring 2008	ME754	754	Nonlinear Control	ME	Mechanical and Materials Engr	4	Nonlinear behavior and controllers are emphasized. Gain scheduling, model following, time-delay and slide-mode techniques will be discussed. Rule-based fuzzy logic and neural network will be developed. Emphasis will be on theory, algorithms, and applications.	GR	LE	Lecture

Spring 2008	ME756	756	Robotics I	ME	Mechanical and Materials Engr	4	(Also listed as CEG 756 and EE 756.) Detailed study of the dynamics and control of robotic systems and robot programming languages and systems. Material covered includes rigid-body dynamics; linear, nonlinear, adaptive, and force control of manipulators; and robot programming languages.	GR	LE	Lecture
Spring 2008	ME757	757	Robotics II	ME	Mechanical and Materials Engr	4	An introduction to sensing, vision, and robot intelligence and task planning. Material covered includes sensors, low-level and higher level vision techniques, task planning including obstacle avoidance and artificial intelligence and expert systems as applied to robotic systems.	GR	LE	Lecture
Spring 2008	ME760	760	Thermodynamics of Solids	ME	Mechanical and Materials Engr	4	Thermodynamics of solutions, reactions, phase transformations, surfaces and interfaces, and point defects. Quasi-chemical model for solutions. Heterogeneous phase equilibria. Phase diagrams and thermodynamic quantities. 3 hours lecture, 1 hour seminar.	GR	LE	Lecture

Spring 2008	ME761	761	Phase Diagrams & Diffusion	ME	Mechanical and Materials Engr	4	Study of equilibrium diagrams through ternary diagrams with an introduction to quaternaries. Advanced topics in diffusion in binary and ternary alloys, ceramics, and intermetallics, defect structures. Fourth-hour discussion of current topics in materials.	GR	LE	Lecture
Spring 2008	ME762	762	Transformation in Solids-I	ME	Mechanical and Materials Engr	4	This is the first course in a two course sequence. Covers the theory of homogenous and heterogeneous nucleation and diffusion and interface controlled growth.	GR	LE	Lecture
Spring 2008	ME763	763	Transformation in Solids-II	ME	Mechanical and Materials Engr	4	This is the second course in a two course sequence. Covers recovery, recrystallization, grain coarsening, eutectoid decomposition, and spinodal decomposition.	GR	LE	Lecture
Spring 2008	ME768	768	Quantitative Microscopy	ME	Mechanical and Materials Engr	4	Deals with quantifying microstructural features, such as volume fraction, grain size, shape, and orientation of phases. The course covers stereology, the science of relating 2-dimensional images to 3-dimensional structure, and image analysis.	GR	LE	Lecture

Spring 2008	ME772	772	Physical Polymer Science	ME	Mechanical and Materials Engr	4	Polymer physics including phase diagrams, phase separation, the amorphous and crystalline states, liquid crystals, thermal transitions, viscoelasticity and rheology, as well as deformation and fracture.	GR	LE	Lecture
Spring 2008	ME782	782	Processing of Egr Materials	ME	Mechanical and Materials Engr	3	In-depth study of processing-microstructure-property relationships for selected engineering materials.	GR	LE	Lecture
Spring 2008	ME783	783	Ceramics-Advanced Application	ME	Mechanical and Materials Engr	4	Science and technology of ceramics and glasses and their use in various products; atomic structure; bonding; defect-microstructure-property relations; thermal and structural ceramics; electronic, optical, and dielectric ceramics; and special applications.	GR	LE	Lecture
Spring 2008	ME786	786	Appl Plasticity & Metal Form	ME	Mechanical and Materials Engr	4	Yield criteria and flow rules for isotropic and anisotropic materials. Mechanics of plastic deformation including slab, upper-bound, slip-line field, and finite-element methods. Applications to metal forming.	GR	LE	Lecture
Spring 2008	ME789	789	Continuing Registration	ME	Mechanical and Materials Engr	1		GR	IS	Independent Study
Spring 2008	ME880	880	Sel Topics in Systems Egr	ME	Mechanical and Materials Engr	3	Selected topics in current research and recent developments in systems theory and engineering.	GR	IS	Independent Study

Spring 2008	ME890	890	Special Problems in ME	ME	Mechanical and Materials Engr	1	Special problems in advanced engineering topics. Titles vary.	GR	IS	Independent Study
Spring 2008	ME898	898	PH D Dissertation Research	ME	Mechanical and Materials Engr	1	Research on the Ph.D. dissertation topic. Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	ME899	899	Thesis	ME	Mechanical and Materials Engr	1	Graded pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	MED600	600	Student Initiated Elective	MED	Medicine	2		MD	LE	Lecture
Spring 2008	MED601	601	Office Based Int Medicine	MED	Medicine	2		MD	LE	Lecture
Spring 2008	MED602	602	Complimentary/Alt Medicine	MED	Medicine	2		MD	CL	Clinical
Spring 2008	MED700	700	Medicine Clerkship	MED	Medicine	24		MD	CL	Clinical
Spring 2008	MED800	800	Student-Initiated Elective	MED	Medicine	4		MD	CL	Clinical
Spring 2008	MED805	805	Clinical Cardiology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED806	806	Clinical Cardiology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED807	807	Clinical Cardiology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED808	808	Clinical Pulmonary Disease	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED813	813	Med Oncology/Hematology	MED	Medicine	8		MD	CL	Clinical

Spring 2008	MED815	815	Med Hematology/Oncology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED817	817	Hematology and Oncology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED819	819	Clinical Nephrology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED820	820	Gastroenterology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED821	821	Clinical Gastroenterology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED826	826	Geriatric Med/Prim Care Phys	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED827	827	Clinical Nephrology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED829	829	JI Internal Medicine	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED834	834	Ambulatory Mgmt Inf Disease	MED	Medicine	4		MD	CL	Clinical
Spring 2008	MED837	837	Critical Care Medicine	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED838	838	Critical Care Medicine	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED839	839	Adult Infectious Diseases	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED844	844	Critical Care Medicine	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED846	846	Clin/Interventional Cardiology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED847	847	Clinical Dermatology	MED	Medicine	8		MD	CL	Clinical

Spring 2008	MED848	848	Pulmonary and Sleep Medicine	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED849	849	Clinical Rheumatology	MED	Medicine	4		MD	CL	Clinical
Spring 2008	MED850	850	Clinical Rheumatology	MED	Medicine	4		MD	CL	Clinical
Spring 2008	MED852	852	JI, Int Med/Private Service	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED854	854	Advanced Internal Medicine	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED860	860	Cardiology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED861	861	Endocrinology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED862	862	Hematology and Oncology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED863	863	Infectious Disease	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED864	864	Pulmonary	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED865	865	Gastroenterology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED866	866	General Medicine, Inpatient	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED867	867	Med Intensive Care Unit	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED868	868	Nephrology	MED	Medicine	8		MD	CL	Clinical
Spring 2008	MED869	869	Neurology	MED	Medicine	8		MD	CL	Clinical

Spring 2008	MED871	871	Adult Infectious Diseases	MED	Medicine	4		MD	CL	Clinical
Spring 2008	MED900	900	Extramural	MED	Medicine	4		MD	H	Hospital
Spring 2008	MGT100	100	World of Business & Adm	MGT	Manage ment	3	An introduction to the elements of the business environment and the major functions of business: management, marketing, manufacturing, human resources, finance, and accounting.	UG	LE	Lecture
Spring 2008	MGT101	101	Community Leadership	MGT	Manage ment	3	Provides experiential skill development in the areas of leadership and community service. Students will complete a group community service project, which will be developed in conjunction with the Junior Leadership Dayton program. Open only to Junior Leadership Dayton students. Graded pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	MGT200	200	Elements of Management	MGT	Manage ment	4	For undergraduate, nonbusiness students to acquire a basic understanding of the history, practices, and roles of managers in work organizations.	UG	LE	Lecture

Spring 2008	MGT304	304	Mgt & Org Behavior	MGT	Management	4	Introduction to fundamental concepts necessary for understanding behavior in an organizational setting. Course incorporates three levels of analysis (individual, group, and organizational) to provide students with a balanced foundation for developing effective management skills.	UG	LE	Lecture
Spring 2008	MGT321	321	Human Resources Mgt	MGT	Management	4	Analysis of the human resources system; interrelationship of policy areas such as staffing, development, and utilization.	UG	LE	Lecture
Spring 2008	MGT404	404	Emp Intw Theory & Prac	MGT	Management	4	This course will survey the current scholarly and applied research literature of the employment process from the perspective of both applicant and employer. Focus will be on recruitment and selection methodologies.	UG	LE	Lecture
Spring 2008	MGT410	410	Organization Development	MGT	Management	4	Focuses on development as a systematic, continuing process designed to improve an organization's ability to cope with change. Topics include anticipation of change, overcoming resistance, and intervention strategies. Writing intensive course.	UG	LE	Lecture
Spring 2008	MGT410W	410W	Writing in MGT 410	MGT	Management	0	Required writing component for MGT 410.	UG	LB	Lab

Spring 2008	MGT411	411	Leadership and Teams	MGT	Management	4	Focuses on advanced theoretical models and effective skills in developing managerial leadership in organizations; and leadership style assessments and structured programs for ongoing professional leadership development.	UG	LE	Lecture
Spring 2008	MGT412	412	Employee/Labor Relations	MGT	Management	4	This course provides two perspectives: managing in a unionized environment and managing in a non-unionized environment. The critical aspects of both types of organizations will be analyzed.	UG	LE	Lecture
Spring 2008	MGT425	425	HR Consulting Skills	MGT	Management	4	Students will learn theory and application of various HR activities, primarily compensation and staffing. Students work in teams as HR consultants to a local small business.	UG	LE	Lecture
Spring 2008	MGT470	470	Business Integrity	MGT	Management	4	Managing individual and collective organizational ethics issues in domestic and global environments; ethics cases in business functions; moral accountability; ethics, innovation and sustainability; improving moral judgment and ethical work cultures; corporate governance ethics.	UG	LE	Lecture

Spring 2008	MGT473	473	Managing Conflict in Bus	MGT	Management	4	Conflict at work has positive and negative outcomes. Effectively managed, it strengthens relationships, while the converse destroys them. Basic theories provide foundation for practical applications of conflict resolution techniques in diverse work situations.	UG	LE	Lecture
Spring 2008	MGT474	474	Quality Bus Practices	MGT	Management	4	A domestic and global survey of best quality business practices and consulting processes. Examines team application of latest quality assessment and development tools to existing companies in order to accelerate transformation.	UG	LE	Lecture
Spring 2008	MGT475	475	Small Business Consulting	MGT	Management	4	Students will work in teams with small businesses to develop a business plan. They will look at marketing, finances, staffing, etc. needed to start a business or grow an existing business. This class provides excellent hands-on application of previous course work.	UG	LE	Lecture
Spring 2008	MGT477	477	Special Studies	MGT	Management	1	Reading or research in a selected field of management. Topics vary.	UG	IS	Independent Study
Spring 2008	MGT478	478	Hon: Ind Study in Mgt	MGT	Management	2	Research in management for fulfillment of the Honors program project requirement.	UG	IS	Independent Study

Spring 2008	MGT480	480	Special Topics in Mgt	MGT	Management	1	Seminar in special topics such as organizational assessment, training and development, and personal career development. Topics vary.	UG	SE	Seminar
Spring 2008	MGT481	481	Internship	MGT	Management	3	A practical application that integrates academic learning with HRM or management work experiences. This linkage allows students to test their classroom learning in an organizational setting. Limited to HRM and management majors with senior status.	UG	IN	Internship
Spring 2008	MGT485	485	International Management	MGT	Management	4	Studies fundamental concepts of international management and examines cultural, institutional, behavioral, and management systems and their operation in the international sphere.	UG	LE	Lecture
Spring 2008	MGT493	493	Ethical/Legal Issues Bus.	MGT	Management	4	Ethical and legal issues in business, government and society; corporate governance accountability to stakeholders; responsible business leadership and public policy with respect to investor, employee, consumer, community, technology, and environment relations.	UG	LE	Lecture
Spring 2008	MGT493W	493W	Writing in MGT 493	MGT	Management	0	Required writing component for MGT 493.	UG	LB	Lab

Spring 2008	MGT495	495	HR Strategy Practicum	MGT	Management	4	Integrated human resource management strategies. Students will work in groups to analyze human resource structures, policies, and programs in field situations.	UG	LE	Lecture
Spring 2008	MGT499	499	Strategic Mgt/Org Policy	MGT	Management	4	Integrative course requiring application of all functional areas of business in the analysis and solution of business problems. Strategic management is the core synthesizing concept of study. Students are required to work in teams.	UG	LE	Lecture
Spring 2008	MGT675	675	Small Business Consult	MGT	Management	3	Students will work in teams with small businesses to develop a business plan. They will look at marketing, finances, staffing, etc. needed to start a business or grow an existing business. Provides excellent hands-on application of previous course work.	GR	LE	Lecture
Spring 2008	MGT680	680	Special Topics	MGT	Management	1	Seminar in an area of current interest in management or human resource management. Topics vary. May be taken for letter grade or pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	MGT685	685	International Management	MGT	Management	4	Studies fundamental concepts of international management and examines cultural, institutional, behavioral, and management systems and their operation in the international sphere.	GR	LE	Lecture

Spring 2008	MGT703	703	Sem Human Resource Mgt	MGT	Management	4	Analysis of the principal functions, processes, and problems involved in the management of human resources. Evaluation of personnel systems, with emphasis on implications of personnel policy and practice.	GR	SE	Seminar
Spring 2008	MGT705	705	Sem Industrial Relations	MGT	Management	4	Presents organization development as an ongoing change process that must be planned and managed. A variety of interventions are explained and situations are analyzed to determine effectiveness.	GR	SE	Seminar
Spring 2008	MGT706	706	Organ Dev and Change	MGT	Management	4	Organization development is presented as an ongoing change process that must be planned and managed. A variety of interventions are explained, and situations are analyzed to determine effectiveness.	GR	LE	Lecture
Spring 2008	MGT766	766	Creativity & Innovation	MGT	Management	4	Course addresses importance of innovation to organizations, common impediments to innovation, and ways organizations can stimulate, cultivate and implement creative ideas.	GR	LE	Lecture
Spring 2008	MGT770	770	Fundamentals of Proj Mgt	MGT	Management	4	Concepts and philosophies are developed by which modern management deals with one-time projects/tasks that have a set of specified time, cost, and performance objectives.	GR	LE	Lecture

Spring 2008	MGT772	772	Project Contract Mgt	MGT	Management	4	Overview of the role of contracting and contract administration in contemporary society. Analysis and synthesis of the relationship of contracting to the project management system.	GR	LE	Lecture
Spring 2008	MGT773	773	Proj Pln Eval&Contrl Tech	MGT	Management	4	Examines project management techniques that are currently available to aid in planning, estimating, scheduling, and controlling a project from inception to completion. Current project management software is used and/or demonstrated.	GR	LE	Lecture
Spring 2008	MGT780	780	Management Internship	MGT	Management	3	One-quarter internship in a selected private or governmental organization under the direction of a faculty advisor and employment supervisor. Details to be arranged by the department or college office. Enrollment in the M.B.A. Program, completion of at least seven out of ten core courses, and departmental approval required. Titles vary.	GR	IN	Internship
Spring 2008	MGT781	781	Special Studies	MGT	Management	1	Intensive reading or research in a selected field of advanced management. Titles vary.	GR	IS	Independent Study
Spring 2008	MGT799	799	Thesis	MGT	Management	1		GR	IS	Independent Study

Spring 2008	MIL111	111	Intro to Military Science I	MIL	Military Science	2	Introduction to customs, courtesies, doctrine, and organization of the U.S. Army, and policies affecting deployment of land forces.	UG	LE	Lecture
Spring 2008	MIL112	112	Intro to Military Science II	MIL	Military Science	2	Introduction to leadership emphasizing fundamentals and principles of leadership, characteristics of a group, and traits of a leader.	UG	LE	Lecture
Spring 2008	MIL113	113	Intro to Military Science III	MIL	Military Science	2	Analysis of leadership theories and management tasks including analysis of organizational structures, planning and organizing, and controlling rewards and punishments. Extensive use of case studies in leadership and management.	UG	LE	Lecture
Spring 2008	MIL211	211	Intro Military Leadership I	MIL	Military Science	2	Analysis of the light infantry squad's weapons and employment and the leader s role in directing and controlling small units in the execution of offensive and defensive tactical missions. Two hours lecture, one hour lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MIL212	212	Intro Military Leadership II	MIL	Military Science	2	Hands-on approach to the fundamentals of military map reading. Emphasis on identification of terrain features, using grid systems, plotting locations, measuring distances, intersection, resection, and graphic representation.	UG	LL	Lecture/Lab Combination

Spring 2008	MIL213	213	Intro Military Leadership III	MIL	Military Science	2	Analysis of the small unit leader's role in the execution of tactical missions. Requires weekend training exercises and participation in a physical fitness program. Two hours conference, one hour lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MIL311	311	Small Unit Leadership I	MIL	Military Science	2	Analysis of the small unit leader's role in the execution of tactical missions. Requires weekend training exercises and participation in a physical fitness program. Two hours conference, one hour lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MIL312	312	Small Unit Leadership II	MIL	Military Science	2	Study of military weapons and equipment and analysis of geography as it pertains to military operations. Requires participation in weekend exercises and physical training program. Two hours conference, one hour lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MIL313	313	Small Unit Leadership III	MIL	Military Science	2	Development of ability to express oneself clearly and accurately with emphasis on analysis of military problems, evaluation of situations, and preparation and delivery of logical solutions. Requires participation in weekend training exercises and physical training program. Two hours conference, one hour lab.	UG	LL	Lecture/Lab Combination

Spring 2008	MIL411	411	Advanced Leadership I	MIL	Military Science	2	Study of the organization and functions of military staffs with an in-depth analysis of the coordinating staff. Introduction into officer-enlisted relations. Requires participation in weekend training exercises and a physical fitness program. Two hours conference, one hour lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MIL412	412	Advanced Leadership II	MIL	Military Science	2	briefing techniques/formats. Introduction to professionalism and military professional ethics. Requires participation in weekend training exercises and a physical fitness program. Two hours conference, one hour lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MIL413	413	Advanced Leadership III	MIL	Military Science	2	Study/analysis of selected leadership and management problems within the military justice system. Introduction to the counseling obligations and responsibilities of an officer. Requires participation in weekend training exercises and a physical fitness program. Two hours conference, one hour lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MIL450	450	Advanced Topics	MIL	Military Science	1	Independent study project on selected recent or current events that impact on U.S. Army operations, doctrine, structure, planning, or organization. A detailed presentation, causes, actions, and results of a selected topic.	UG	IS	Independent Study

Spring 2008	MIS100	100	Intro Comp-Based Info Systems	MIS	Management Information Systems	4	Computer literacy, information processing fundamentals, and terminology pertinent to using and developing computer applications. Students access database software and the Internet in the lab session. Three hour lecture, one hour lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MIS215	215	Business Data Structures	MIS	Management Information Systems	4	Abstract data types, data structures, and their implementation in object-oriented programs. Data structures covered include stacks, queues, lists, trees, and graphs. Course requirements include designing and testing object-oriented programs for business applications. Prerequisite: CS 209, MTH 228.	UG	LL	Lecture/Lab Combination
Spring 2008	MIS300	300	Introduction to MIS	MIS	Management Information Systems	4	Examination of management information systems from a user perspective. Emphasis on the system life cycle, including computer system analysis and design and the software development life cycle. Database support used to build an information system. Three hours lecture, one hour lab.	UG	LL	Lecture/Lab Combination

Spring 2008	MIS305	305	Business Operating Systems	MIS	Management Information Systems	4	Review of computer architecture and system administration. Topics include processor management, concurrent programming, memory management, file system, I/O system, network system, and system maintenance. Emphasis is on system administration and programming in business organizations. Prerequisite: MIS 215.	UG	LL	Lecture/Lab Combination
Spring 2008	MIS325	325	Analysis & Design of Info Sys	MIS	Management Information Systems	4	Overview of the system analysis and design methodologies. Topics include planning, SDLC, project management overview, data, process and logic modeling techniques. Students learn to specify design, implementation, specifications, and testing plans.	UG	LL	Lecture/Lab Combination
Spring 2008	MIS345	345	E-Bus Strategy, Design & Appl	MIS	Management Information Systems	4	An introduction to E-business strategy and design. Students will examine electronic methods of delivering products and services between organizations (B2B) and consumers (B2C). A solution to an e-business case will be developed.	UG	LL	Lecture/Lab Combination

Spring 2008	MIS415	415	Business Database Systems	MIS	Management Information Systems	4	Understanding concepts, principles and data models of managing organizational data. Students will gain extensive experience in developing data models, applying relational database software, creating and using complex queries, and learning recent topics. Prerequisite or corequisite: MIS 325.	UG	LL	Lecture/Lab Combination
Spring 2008	MIS425	425	Business Networks & Telecom	MIS	Management Information Systems	4	Familiarize students with the background, comcepts, types, proper applications, and components of telecommunications, network design, and distributed information systems. Emphasis is on the telecommunications technology and its impact on information systems and business operations. Prerequisite: MIS 300.	UG	LE	Lecture
Spring 2008	MIS450	450	Sys Develop & Implementation	MIS	Management Information Systems	4	An introduction to the basic principles, methods, and tools of software development. Concentrates on software development discipline, encompassing different paradigms and methods. Topics include software conventional and object-oriented design and development methods, software quality assurance, and software measurement.	UG	LE	Lecture

Spring 2008	MIS450W	450W	Writing in MIS 450	MIS	Management Information Systems	0		UG	LB	Lab
Spring 2008	MIS477	477	Special Studies in MIS	MIS	Management Information Systems	1	Research in selected fields of management information systems. Topics vary.	UG	IS	Independent Study
Spring 2008	MIS478	478	Independent Study in MIS	MIS	Management Information Systems	2	Research in management information systems for fulfillment of the honors project requirement. Senior MIS majors only.	UG	IS	Independent Study
Spring 2008	MIS480	480	Special Topics in MIS	MIS	Management Information Systems	4	Cutting edge topics could include Information Security, Enterprise Integrated Systems and Data Mining and Data Warehouse.	UG	LE	Lecture
Spring 2008	MIS481	481	Internship in MIS	MIS	Management Information Systems	1	Faculty-supervised internship in management information systems. Students work on an information systems project in a firm or public agency and submit reports for completion of the course.	UG	IN	Internship
Spring 2008	MIS481W	481W	Writing in MIS	MIS	Management Information Systems	0		UG	LB	Lab

Spring 2008	MIS495	495	IS Project Mgt & Development	MIS	Management Information Systems	4	Introduce concept, practice, and the importance of project management. Students work in teams to gain practical experience in analyzing, designing, implementing, evaluating, and development of information system, for businesses and non-profit organizations.	UG	LE	Lecture
Spring 2008	MIS700	700	Info Systems Delelopment	MIS	Management Information Systems	4	Focuses on basic principles, methods and tools of development of information systems by considering framing and execution of IS projects within organizational contexts. Particular attention is given to problem structuring and problem design issues.	GR	LE	Lecture
Spring 2008	MIS705	705	E-Business Strategy/Technology	MIS	Management Information Systems	4	Introduction to electronic commerce including fundamentals, applications, benefits and limitations, security and risks, infrastructure and other issues.Primary theme is proper application of electronic commerce and its technologies to gain competitive advantage for business.	GR	LE	Lecture

Spring 2008	MIS710	710	Managing Business Data	MIS	Management Information Systems	4	Database concepts, data modeling with E/RD, approaches, relational database model and design, SQL, object-oriented database concepts, semi-structured data and XML, database system implementation, emerging trends, and a term project.	GR	LE	Lecture
Spring 2008	MIS720	720	Telecommunications Management	MIS	Management Information Systems	4	Includes data communications hardware, software, terminology, and network topology. Discusses the impact of communications on business operations, globalization and management practices, and investigates the issues related to managing networks.	GR	LE	Lecture
Spring 2008	MIS781	781	Special Studies in MIS	MIS	Management Information Systems	1	Intensive research in a selected field of management information systems. Topics vary. Prerequisite: permission of instructor	GR	IS	Independent Study
Spring 2008	MIS788	788	Info Systems Strategy	MIS	Management Information Systems	4	Concepts and practices of management information systems for using information in the management of business enterprises are investigated to determine their deployment in achieving organization objectives.	GR	LE	Lecture

Spring 2008	MIS790	790	Tech-Enabled Bus & Orgz	MIS	Management Information Systems	4	This course provides a broad overview of the strategies used in technology enabled businesses. The emphasis on the business applications and characteristics of the technologies that can bring enhanced revenues, cost savings, and broader market reach to organizations.	GR	LE	Lecture
Spring 2008	MIS791	791	Business Process Management	MIS	Management Information Systems	4	This course provides a comprehensive approach for transforming business processes of an organization. It will demonstrate how to keep the renewed process working at their optimum level through process ownership and performance management.	GR	LE	Lecture
Spring 2008	MIS792	792	Cust Rel Mgt & Bus Intel	MIS	Management Information Systems	4	An in-depth study of customer relationship management (CRM) technologies and data warehouse applications. The special focus on the application of CRM and data warehouse technologies for managing the customer and data lifecycle.	GR	LE	Lecture

Spring 2008	MIS793	793	Enterprise Appl Integret	MIS	Management Information Systems	4	This course provides a background in the fundamental principles of Enterprise Application Integration (EAI). Different types of Integration projects are explained, including intra-organization Enterprise Application Integration (EAI), Web integration and B2B integration.	GR	LE	Lecture
Spring 2008	MIS794	794	Adv Data Mgt For SC	MIS	Management Information Systems	4	The subject surveys concepts and advanced data management for Supply Chain Management. It will address a number of technology enablers of supply chain management including ERP and SCM applications, Web-centric marketplaces, and auction technologies.	GR	LE	Lecture
Spring 2008	MIS795	795	IS Project Mgt	MIS	Management Information Systems	4	IS Project management encompasses the knowledge, techniques, and tools necessary to manage the development of information systems projects. Leading edge tools, techniques, and concepts will be presented through the course.	GR	LE	Lecture
Spring 2008	MIS796	796	Information Assurance	MIS	Management Information Systems	4	This survey course will provide an understanding of communications and IT infrastructures, their vulnerability as well as the size and complexity of security threats faced by enterprises.	GR	LE	Lecture

Spring 2008	MIS797	797	Mgt of Tech Services	MIS	Management Information Systems	4	The objectives of this course are to provide an understanding of the unique challenges inherent in profit delivering service excellence and providing an introduction to state of the art service management thinking.	GR	LE	Lecture
Spring 2008	MIS798	798	IT Outsource & Partnership	MIS	Management Information Systems	4	This course examines the dynamic of IT partnerships. To manage a global project, project managers need to be experts in defining requirements, managing change, communications, cultural sensitivity, planning and conducting project reviews, and negotions.	GR	LE	Lecture
Spring 2008	MIS799	799	IS Mgt Research Project	MIS	Management Information Systems	8	The Capstone IT Project provides students the opportunity to individually explore a problem or issue within the IT field study.	GR	LE	Lecture
Spring 2008	MKT250	250	Principles of Marketing	MKT	Marketing	4	Survey course dealing with the role of marketing in society, customer selection, product management, channels of distribution, pricing concepts, promotional activity, research and planning with an economic and business environment.	UG	LE	Lecture
Spring 2008	MKT277	277	Int'l Marketing Study Tour	MKT	Marketing	1		UG	LE	Lecture

Spring 2008	MKT303	303	Consumer Behavior	MKT	Marketing	4	An understanding ot the purchase decision processes of individuals and families. Examination of psychological, economic, societal and cultural influences on consumer decisions. Marketing strategy implications of conceptual contructs are discussed throughout the course.	UG	LE	Lecture
Spring 2008	MKT325	325	Sports and Event Marketing	MKT	Marketing	4	Overview of the multidimensional activities within this industry. An industry framework will be presented to explain the strategic marketing process, contrasting its similarities and differences to the well-studied marketing process.	UG	LE	Lecture
Spring 2008	MKT356	356	Services Marketing	MKT	Marketing	4	Explores the fundamental product, price, promotion, and distribution issues that require special attention in the marketing of services and their related current and emerging theories and strategies for effective implementation.	UG	LE	Lecture
Spring 2008	MKT366	366	Personal Selling & Sales Mgt	MKT	Marketing	4	Emphasizes personal selling-marketing relationships, buyer motivation and behavior, selling strategy, and techniques of selling. Objectives, policies, and techniques of sales force management including financial and performance responsibilities and opportunities.	UG	LE	Lecture

Spring 2008	MKT418	418	Price Management	MKT	Marketing	4	Evaluation and application of existing and developing pricing techniques, procedures, concepts, and theories to simulated and real price management problems.	UG	LE	Lecture
Spring 2008	MKT421	421	International Marketing	MKT	Marketing	4	Analysis of the nature and scope of international marketing including its managerial and operational problems. Emphasis is on the role of environmental differences that influence marketing strategy.	UG	LE	Lecture
Spring 2008	MKT431	431	Supply-Chain Distribution	MKT	Marketing	4	Introduction to the concepts and procedures, the importance, and the management of the "supply chain" that physically moves products and services down the chain of companies to the final customer.	UG	LE	Lecture
Spring 2008	MKT446	446	Integrated Marketing Comm	MKT	Marketing	4	The course will introduce students to integrated marketing communications including advertising, direct marketing, public relations and sales promotion. Includes discussion of creative and media strategies.	UG	LE	Lecture

Spring 2008	MKT447	447	Technologies in Marketing	MKT	Marketing	4	Understanding marketing technologies. Topics will vary; may include micro marketing, geo-demographic marketing, data mining, Internet marketing, diffusion models, competitive advantage, Howard models of consumer behavior and sales forecasting.	UG	LE	Lecture
Spring 2008	MKT451	451	Marketing Research	MKT	Marketing	4	Examination of marketing research processes. Focuses on concepts and procedures, the importance and the management of research in marketing.	UG	LE	Lecture
Spring 2008	MKT452	452	Marketing Strategy	MKT	Marketing	4	The goals of the course are to develop students' abilities to recognize opportunities and solve problems related to marketing strategy and improve students' decision making skills as applied to the planning of marketing programs.	UG	LE	Lecture
Spring 2008	MKT461	461	Principles of Retailing	MKT	Marketing	4	Analysis of the performance of marketing functions at the retail level. Emphasis on institutional and competitive factors and management of the marketing mix as it relates to retail market segments.	UG	LE	Lecture

Spring 2008	MKT471	471	Business-To-Business Marketing	MKT	Marketing	4	Explores business-to-business marketing - the marketing of goods and services to businesses rather than consumers. Examines the diferences between consumer and business marketing in target markets, product, price, promotion, distribution and the environment.	UG	LE	Lecture
Spring 2008	MKT475	475	Entrepreneurship	MKT	Marketing	4	How to start a business. Concepts, strategies and tactics of product innovation/development and planning to initiate of purchase a company. Students may develop a written business plan for a new venture.	UG	LE	Lecture
Spring 2008	MKT477	477	Ind Studies in Marketing	MKT	Marketing	1	Research or other marketing project.	UG	IS	Independent Study
Spring 2008	MKT478	478	Honors:Ind Study in Marketing	MKT	Marketing	2	Research in marketing for fulfillment of the Honors program project requirement	UG	IS	Independent Study
Spring 2008	MKT480	480	Special Topics in Marketing	MKT	Marketing	4	Seminar in special topics such as consumerism and social issues, nonprofit organization marketing, advanced retailing management, channels of distribution, and forecasting. Topics vary.	UG	LE	Lecture
Spring 2008	MKT481	481	Internship in Marketing	MKT	Marketing	1	Faculty-supervised internship in marketing area.	UG	IN	Internship

Spring 2008	MKT492	492	Senior Projects in Marketing	MKT	Marketing	4	Final course to integrate the students' work in marketing and to practice marketing problem-solving. Particular emphasis is given to the development of marketing plans.	UG	LE	Lecture
Spring 2008	MKT492W	492W	Writing in MKT 492	MKT	Marketing	0	Required writing component for MKT 492.	UG	LB	Lab
Spring 2008	MKT653	653	Special Topics in Marketing	MKT	Marketing	4	Seminars in marketing - related topics.	GR	LE	Lecture
Spring 2008	MKT705	705	Integrated Marketing Comm	MKT	Marketing	4	Study of the promotional components of an integrated marketing communications plan, development and implementation of promotional and integration strategies and tactics.	GR	LE	Lecture
Spring 2008	MKT707	707	Marketing Research & Analysis	MKT	Marketing	4		GR	LE	Lecture
Spring 2008	MKT716	716	International Marketing	MKT	Marketing	4	Introduces the concepts and language of international marketing and examines institutional, behavioral, and managerial aspects of a cross section of national marketing systems and multinational organization operations.	GR	LE	Lecture
Spring 2008	MKT720	720	Service and Non-Profit Mkt	MKT	Marketing	4	Explores fundamental marketing issues that require special attention in the marketing of services, including non-profit marketing.	GR	LE	Lecture

Spring 2008	MKT727	727	Database Marketing	MKT	Marketing	4	Concepts and principles of database marketing, including direct marketing strategies and tactics.	GR	LE	Lecture
Spring 2008	MKT730	730	Consumerism & Soc Issues-Mkt	MKT	Marketing	3	Critical study of marketing concepts and practices as related to contemporary social issues in the American economy: consumerism, ecology, product safety, truth in advertising, poverty, national interest, social responsibility, and government's role in consumer protection. Emphasis on the institutional and managerial philosophy points of view, not a legal perspective.	GR	LE	Lecture
Spring 2008	MKT775	775	Entrepreneurship	MKT	Marketing	4	Problems and perspectives in starting new ventures. Concepts and techniques of searching for market opportunities, screening and evaluating potentials, negotiating, and financing to initiate or purchase a company. May develop individual written business plan.	GR	LE	Lecture
Spring 2008	MKT780	780	Marketing Internship	MKT	Marketing	4	Faculty-supervised internship in marketing area.	GR	IN	Internship
Spring 2008	MKT781	781	Ind Studies in Marketing Mgt	MKT	Marketing	1	Readings or research in a selected field of marketing.	GR	IS	Independent Study
Spring 2008	MKT789	789	Continuing Registration	MKT	Marketing	1		GR	IS	Independent Study
Spring 2008	MKT799	799	Thesis	MKT	Marketing	1		GR	IS	Independent Study

Spring 2008	ML301	301	French Culture	ML	Modern Languages	4	Study of French culture according to language distinctions with emphasis on the uniqueness within the family of nations.	UG	LE	Lecture
Spring 2008	ML302	302	Germanic Culture	ML	Modern Languages	4	Study of German culture according to language distinctions with emphasis on the uniqueness within the family of nations	UG	LE	Lecture
Spring 2008	ML303	303	Spanish Culture	ML	Modern Languages	4	Study of Spanish cultures according to language distinctions with emphasis on the uniqueness within the family of nations	UG	LE	Lecture
Spring 2008	ML304	304	Spanish-American Culture	ML	Modern Languages	4	Study of Spanish-American culture according to language distinctions with emphasis on the uniqueness within the family of nations.	UG	LE	Lecture
Spring 2008	ML304W	304W	Writing in ML 304	ML	Modern Languages	0		UG	LB	Lab
Spring 2008	ML305	305	Russian Culture	ML	Modern Languages	4	Study of Russian culture according to language distinctions with emphasis on the uniqueness within the family of nations.	UG	LE	Lecture
Spring 2008	ML306	306	Intro to Brazilian Culture	ML	Modern Languages	4	Selected works of foreign literature studied in English translation. French literature.	UG	LE	Lecture

Spring 2008	ML307	307	German-American Culture	ML	Modern Languages	4	Emphasizes German heritage of the Ohio Valley, exposing students to the immigrant experience of another culture, enriches students' understandings of themselves. Explores various German-speaking identities through many disciplines.	UG	LE	Lecture
Spring 2008	ML311	311	French Lit in Translation	ML	Modern Languages	4	Selected works of foreign literature studied in English translation. French literature.	UG	LE	Lecture
Spring 2008	ML312	312	German Lit in Translation	ML	Modern Languages	4	Selected works of foreign literature studied in English translation. German literature.	UG	LE	Lecture
Spring 2008	ML313	313	Russian Lit in Translation	ML	Modern Languages	4	Selected works of foreign literature studied in English translation. Russian literature.	UG	LE	Lecture
Spring 2008	ML314	314	Spanish Lit in Translation	ML	Modern Languages	4	Selected works of foreign literature studied in English translation. Spanish literature.	UG	LE	Lecture
Spring 2008	ML314W	314W	Writing in ML 314	ML	Modern Languages	0		UG	LB	Lab
Spring 2008	ML315	315	Spanish-Amer Lit Translation	ML	Modern Languages	4	Selected works of foreign literature studied in English translation. Spanish-American literature.	UG	LE	Lecture
Spring 2008	ML315W	315W	Writing in ML 315	ML	Modern Languages	0		UG	LB	Lab
Spring 2008	ML316	316	Scandinavian Lit Translation	ML	Modern Languages	4	Selected works of foreign literature studied in English translation. Scandinavian literature.	UG	LE	Lecture
Spring 2008	ML369	369	Chld Lit Tchr of Foreign Lang	ML	Modern Languages	4	Problems, approaches, and topics in the field of modern languages. Topics vary.	UG	LE	Lecture

Spring 2008	ML399	399	Studies in Selected Subjects	ML	Modern Languages	1	Problems, approaches, and topics in the field of modern languages. Topics vary.	UG	LE	Lecture
Spring 2008	ML569	569	Chld Lit Tchrs of Foreign Lang	ML	Modern Languages	4	Reading and discussion of children's books in modern languages (French, Spanish, Berman) and reading informational books about the countries where the languages are spoken.	GR	LE	Lecture
Spring 2008	ML599	599	Studies in Selected Subjects	ML	Modern Languages	1	Course of variable content dealing with problems, approaches, and topics in the field of modern languages.	GR	LE	Lecture
Spring 2008	MP131	131	Film Appreciation	MP	Motion Picture	4	Introduction to film appreciation and analysis; examines critical approaches to film and film style including authorship and genre.	UG	LE	Lecture
Spring 2008	MP180	180	Film Production I	MP	Motion Picture	3	Introduction to the basic elements of film production including scripting, cinematography, editing, and sound. Participation on super-8 film projects from initial conception to final screening.	UG	LL	Lecture/Lab Combination
Spring 2008	MP231	231	History of Motion Picture I	MP	Motion Picture	3	Historical development of the art of the film from 19th-century scientific experiments through the end of silent era. Examination of technical, social, economic, and cultural factors that have shaped film art.	UG	LE	Lecture
Spring 2008	MP231W	231W	Writing in MP 231	MP	Motion Picture	0		UG	LB	Lab

Spring 2008	MP232	232	History of Motion Picture II	MP	Motion Picture	3	Historical development of the art of the film from beginning of the sound era to the mid-fifties. Consideration of both American and European film and relation of films to sociocultural conditions.	UG	LE	Lecture
Spring 2008	MP233	233	History of Motion Picture III	MP	Motion Picture	3	Historical development of the art of the film from the beginning of the mid-fifties to the present. The decline of the studio system, major film movements of the sixties, and the rise of independent feature production are considered.	UG	LE	Lecture
Spring 2008	MP233W	233W	Writing in MP 233	MP	Motion Picture	0	Required writing component for MP 233.	UG	LB	Lab
Spring 2008	MP253	253	Basic Video Production	MP	Motion Picture	3	(Also listed as COM 253.) Introduction to the use of video production equipment, using lecture, demonstration, and experiential approaches. Appropriate laboratory time provided in television studio. Prerequisite: COM 152, or permission of instructor.	UG	LB	Lab
Spring 2008	MP281	281	Intermediate Film Production	MP	Motion Picture	3	Production of medium length film projects under faculty supervision. Review of lip-sync film production techniques and discussion of special production problems. Includes writing of film treatment and shooting script, and shooting and finishing a medium-length film.	UG	LL	Lecture/Lab Combination

Spring 2008	MP282	282	Intermediate Film Production	MP	Motion Picture	3	Production of medium length film projects under faculty supervision. Review of lip-sync film production techniques and discussion of special production problems. Includes writing of film treatment and shooting script, and shooting and finishing a medium-length film.	UG	LL	Lecture/Lab Combination
Spring 2008	MP283	283	Intermediate Film Production	MP	Motion Picture	3	Production of medium length film projects under faculty supervision. Review of lip-sync film production techniques and discussion of special production problems. Includes writing of film treatment and shooting script, and shooting and finishing a medium-length film.	UG	LL	Lecture/Lab Combination
Spring 2008	MP331	331	Studies in Film History	MP	Motion Picture	3	Provides intensive study of selected areas of film history. Titles vary. (Previously listed as TH 331.)	UG	LE	Lecture
Spring 2008	MP332	332	Studies in Film Authorship	MP	Motion Picture	3	Provides an intensive study of the work of one or more film directors or other creative personnel, such as screenwriters or performers. Titles vary.	UG	LE	Lecture
Spring 2008	MP333	333	Studies in Film Genre	MP	Motion Picture	3	Provides an intensive study of a film genre (e.g., the western, the musical, and the gangster film). Titles vary.	UG	LE	Lecture

Spring 2008	MP334	334	Hist & Thry Documentary Film	MP	Motion Picture	3	Comprehensive survey of the history of documentary film and an introduction to the theories and approaches used by documentary filmmakers throughout this century.	UG	LE	Lecture
Spring 2008	MP381	381	16MM Film Production	MP	Motion Picture	5	Production of 16mm film and video projects under faculty supervision including budgeting, financing, and production. Emphasis on the documentary, fiction, and independent film within the free-lance 16mm market.	UG	LL	Lecture/Lab Combination
Spring 2008	MP382	382	16MM Film Production	MP	Motion Picture	5	Production of 16mm film and video projects under faculty supervision including budgeting, financing, and production. Emphasis on the documentary, fiction, and independent film within the free-lance 16mm market.	UG	LL	Lecture/Lab Combination
Spring 2008	MP383	383	16MM Film Production	MP	Motion Picture	5	Production of 16mm film and video projects under faculty supervision including budgeting, financing, and production. Emphasis on the documentary, fiction, and independent film within the free-lance 16mm market.	UG	LL	Lecture/Lab Combination
Spring 2008	MP399	399	Studies in Selected Subjects	MP	Motion Picture	1	Problems, approaches, and topics in the field of motion pictures. Topics vary.	UG	LE	Lecture
Spring 2008	MP399W	399W	Writing in MP 399	MP	Motion Picture	0		UG	LB	Lab

Spring 2008	MP435	435	Studies in Film Criticism	MP	Motion Picture	3	Intensive examination of a selected area of film criticism. Titles vary.	UG	LE	Lecture
Spring 2008	MP436	436	Studies in Film Production	MP	Motion Picture	3	Provides an intensive study of a selected area of film production. Titles vary.	UG	LL	Lecture/Lab Combination
Spring 2008	MP436W	436W	Writing in MP 436	MP	Motion Picture	0		UG	LB	Lab
Spring 2008	MP481	481	Senior Practicum in Filmmaking	MP	Motion Picture	3	Requires production of a 16mm sound film to answer print stage with optical soundtrack, and the organization of a cumulative senior screening including the practicum films.	UG	IS	Independent Study
Spring 2008	MP490	490	Independent Screening	MP	Motion Picture	3	Independent screenings of 25 films chosen by the student to comprise an integrated program of historical/theoretical focus. Screenings to be accompanied by the reading of appropriate analytical commentary under the direction of faculty member.	UG	IS	Independent Study
Spring 2008	MP499	499	Ind Study Film Hstry,Thry,Crit	MP	Motion Picture	1	Independent Study in Film History, Theory, Criticism, and Practice Independent work to culminate in thesis and/or film.	UG	IS	Independent Study
Spring 2008	MP499W	499W	Writing in MP 499	MP	Motion Picture	0		UG	LB	Lab
Spring 2008	MP531	531	Studies in Film History	MP	Motion Picture	3	Intensive study of a selected area of film history. Titles vary.	GR	LE	Lecture

Spring 2008	MP533	533	Studies in Film Genre	MP	Motion Picture	3	Intensive study of a film genre (e.g., the western, the musical, and the gangster film). Titles vary.	GR	LE	Lecture
Spring 2008	MP635	635	Studies in Film Criticism	MP	Motion Picture	3	Intensive examination of a selected area of film criticsm. Titles vary.	GR	LE	Lecture
Spring 2008	MS204	204	Intro to Business Statistics	MS	Manage ment Science	4	Discusses statistical methods used in analysis of business problems, including theory and application of frequency distributions, measures of central tendency and variability, probability distributions, expectation, sampling and estimation, and one-sample hypothesis testing.	UG	LE	Lecture
Spring 2008	MS205	205	Quantitative Business Modeling	MS	Manage ment Science	4	A course designed to introduce students to the study of additional probabilistic models and also to some basic deterministic models.	UG	LE	Lecture
Spring 2008	MS307	307	Intro to Operations Management	MS	Manage ment Science	4	Discusses the major management decision areas in the design and production of goods and services. Major topics include strategic issues, forecasting, inventory management, planning and control systems, quality management, and project management.	UG	LE	Lecture

Spring 2008	MS320	320	Basics of Supply Chain Mgmt	MS	Management Science	4	Explores the fundamentals of supply chain management, including the strategic role of the supply chain, keydrivers of supply chain performance, and analytical tools and techniques for supply chain analysis. Cases and in-class exercises.	UG	LE	Lecture
Spring 2008	MS322	322	Systems Simulation Operations	MS	Management Science	4	Introduction to simulation techniques as applied to operations management. Topics include basic concepts, applications, and technical problems associated with use of systems simulation. Design, operation and output analysis of computer models emphasized.	UG	LE	Lecture
Spring 2008	MS324	324	Managing the Service Sector	MS	Management Science	4	Management of services is different from manufacturing. Course objectives include develop and manage service package, identify and measure service quality, prepare a blueprint for a service operation, and understand service supply chain management.	UG	LE	Lecture
Spring 2008	MS330	330	Quality Management	MS	Management Science	4	Quality is defined, and the various systems that are used for achieving quality products and services are evaluated. Philosophies of quality, quantitative tools for implementation, ISO 9000 and the Baldridge Award are discussed.	UG	LE	Lecture

Spring 2008	MS333	333	Operations Planning	MS	Management Science	4	Explores fundamentals of forecasting and order quantity calculation for both independent and dependent demand, and then the usage of that information to schedule production of those items in typical manufacturing applications.	UG	LE	Lecture
Spring 2008	MS334	334	Global Supply Chain Management	MS	Management Science	4	The objective of this course is to provide students with an understanding of how managers can develop and use the operations function of a business in order to enhance global competition.	UG	LE	Lecture
Spring 2008	MS428	428	Just-In-Time Production Sys	MS	Management Science	3		UG	LE	Lecture
Spring 2008	MS460	460	Strategic Mgmt of Operations	MS	Management Science	4	A strategic perspective for operations is developed, providing a linkage with marketing and other functions. Product profiling is introduced for testing the fit between market characteristics and the company's operations processes and infrastructure.	UG	LE	Lecture
Spring 2008	MS460W	460W	Writing in MS 460	MS	Management Science	0	Required writing component for MS 460.	UG	LB	Lab
Spring 2008	MS477	477	Special Studies in MS	MS	Management Science	1	Topics vary.	UG	IS	Independent Study
Spring 2008	MS478	478	Hon:Independent Study in MS	MS	Management Science	2	Research in management science for fulfillment -of the Honors program project requirement.	UG	IS	Independent Study

Spring 2008	MS480	480	Special Topics in MS	MS	Management Science	4	480-A Operations Management; 480-B Statistical Methods; 480-C Quality Management; 480-D Operations Research. Reading and research into selected topics in the area of Management Science, such as: modeling, simulation, algorithm development.	UG	LE	Lecture
Spring 2008	MS481	481	Internship in Management Sci	MS	Management Science	1	Faculty-supervised internship in management science. Students work in a firm or public agency, participate in seminars, and submit reports for completion of the course.	UG	IN	Internship
Spring 2008	MS495	495	Oper Mgmt Project Mgt & Dev	MS	Management Science	4	Introduce concept, practice, and the importance of project management. Students work in teams to gain practical experience in analyzing, designing, implementing, evaluating, and development of operations management for businesses and non-profit organizations.	UG	LE	Lecture
Spring 2008	MS700	700	Global Supply Chain Management	MS	Management Science	4	Managers must think, plan, and act with reference to international customers, suppliers, competitors, and partners. To design better products and deliver them at lower cost than their competitors, strategic managers are analyzing global issues.	GR	LE	Lecture

Spring 2008	MS732	732	Demand Mgmt in Supply Chain	MS	Management Science	4	Explores the inter-dependency of information flow and material flow in goods-producing environments. Topics include forecasting, order quantity calculation for both independent and dependent demand, and production planning, scheduling, and distribution through the supply chain.	GR	LE	Lecture
Spring 2008	MS755	755	Quality Management	MS	Management Science	4	Concepts, objectives and applications of quality management with emphasis on continuous improvement in business organization. Includes application of statistical process control techniques.	GR	LE	Lecture
Spring 2008	MS770	770	Selected Topics in MS	MS	Management Science	4	Seminar on one of the areas of management science (i.e., operations research, statistical analysis, and logistics). Topics vary.	GR	LE	Lecture
Spring 2008	MS771	771	World Class Strategies	MS	Management Science	4	A strategic perspective for operations is developed, providing a linkage with marketing and other functions. Product profiling is introduced for testing the fit between market characteristics and the company's operations processes and infrastructure.	GR	LE	Lecture
Spring 2008	MS780	780	Internship in Management Sci	MS	Management Science	2		GR	IN	Internship

Spring 2008	MS781	781	Special Studies in MS	MS	Management Science	1	Intensive reading or research in a selected field of management science. Individualized instruction with varying topics.	GR	LE	Lecture
Spring 2008	MS786	786	Adv Supply Chain Management	MS	Management Science	4	Explores advanced topics of supply chain management, including the strategic role of the supply chain, key drivers of supply chain performance, and analytical tools and techniques for supply chain analysis. Cases and in-class exercises.	GR	LE	Lecture
Spring 2008	MS788	788	Basics Supply Chain Management	MS	Management Science	4	Explores the fundamentals of supply chain management, including the strategic role of the supply chain, key drivers of supply chain performance, and analytical tools and techniques for supply chain analysis.	GR	LE	Lecture
Spring 2008	MS789	789	Continuing Registration	MS	Management Science	1		GR	LE	Lecture
Spring 2008	MS790	790	Demand Mgt & Forecasting	MS	Management Science	4	Forecasting has consistently been a critical organizational capability for both strategic and tactical business planning. The role of forecasting has become important as competitive market pressures create the need for improved forecast accuracy.	GR	LE	Lecture

Spring 2008	MS791	791	Benchmarking & Perform Metrics	MS	Management Science	4	This course focuses on the selection, use and evaluation of appropriate metrics for supply chain performance; the use of the benchmarking process; and the use of the Baldridge Criteria for organizational assessment.	GR	LE	Lecture
Spring 2008	MS792	792	Supply Chain Network Design	MS	Management Science	4	The course studies models that explore the key issues associated with the design and management of supply networks. Special attention will be given to integration of supply chain decisions and consequential difficulties.	GR	LE	Lecture
Spring 2008	MS793	793	Supply Chain Operations	MS	Management Science	4	Explores the fundamentals of inventory management, including continuous replenishment, ordering policies, measuring global and chain inventory, inventory positioning within the chain, and risk pooling.	GR	LE	Lecture
Spring 2008	MS794	794	Lean Supply Chain Management	MS	Management Science	4	Focuses on topics which support the development of lean supply chains within the organization. Topics include value stream mapping of processes, Kaizen approach to continuous improvement, and use of quality tools for process evaluation.	GR	LE	Lecture

Spring 2008	MS795	795	Info Tech & Supply Chain	MS	Management Science	4	IT & SC focuses on managing material and information outside the factory walls including aspects of product design collaboration, demand planning and forecasting, inventory deployment, distribution design system, channel management, procurement, and logistics.	GR	LE	Lecture
Spring 2008	MS796	796	Strategic Sourcing	MS	Management Science	4	Course covers current issues of strategic sourcing within organizations. Begins by underscoring the differences between tactical versus strategic sourcing.	GR	LE	Lecture
Spring 2008	MS797	797	Glbl Supp Chain Mgt Strategies	MS	Management Science	4	This course covers important issues relating to global supply chain management and coordinating production plans across the world. Key issues of global operations and SCM will be addressed.	GR	LE	Lecture
Spring 2008	MS798	798	Supply Chain Collaboration	MS	Management Science	4	Course addresses issues of managing entities of the supply chain for efficient information flow and collaborative decision making. Includes cross-enterprizes collaborations, technology structure, intra-enterprise collaboration, and building collaborative supply chains.	GR	LE	Lecture

Spring 2008	MS799	799	SCM Project	MS	Management Science	1	The SCM project will be designed individually by the student and supervised by a faculty member. The project will examine issue areas in supply chain management.	GR	LE	Lecture
Spring 2008	MTE640	640	History of Mathematics	MTE	Mathematics Teacher Education	3		GR	LE	Lecture
Spring 2008	MTE642	642	Prob/Stat-Middle Schl Tchrs	MTE	Mathematics Teacher Education	4	Probability and statistical methods applied to real problems. Scientific method of investigation. Data collection, organization, display, and analysis. Sampling distributions and probability. Introductions to statistical inference. Use of appropriate software and graphing calculator.	GR	LL	Lecture/Lab Combination
Spring 2008	MTE643	643	Alg & Fcns-Middle Schl Tchrs	MTE	Mathematics Teacher Education	4	Polynomial, exponential, logarithmic, rational, and trigonometric functions will be studied from a perspective appropriate for a teacher. Computing, programming, graphing, and data collection technology will be used.	GR	LE	Lecture
Spring 2008	MTE644	644	Prob Solv-Middle Schl Tchrs	MTE	Mathematics Teacher Education	4	A framewrok and useful heuristics for solving problems. Visual thinking and reasoning, metacognition, problem-solving logs and summaries, problem solving individually and in groups.	GR	LE	Lecture

Spring 2008	MTE645	645	Geometry-Middle School Teacher	MTE	Mathematics Teacher Education	4	Axioms, finite geometries, non-metric and metric lengths, angles, area, volume, polygonal figures, elementary curves,. 3 hours lecture, 1 hour lab.	GR	LL	Lecture/Lab Combination
Spring 2008	MTE646	646	Mth Modeling-Middle Schl Tchrs	MTE	Mathematics Teacher Education	4	An introduction to mathematical modeling, with modeling real world problems individually and in groups. Working with the steps involved in modeling a real-life situation and understanding how modeling differs from simple problem solving.	GR	LE	Lecture
Spring 2008	MTE648	648	Calculus-Middle School Teacher	MTE	Mathematics Teacher Education	4	An exploration and study designed to provide conceptual understanding of differentiation and integration with examples of their diverse applications and their connections to algebra and geometry.	GR	LL	Lecture/Lab Combination
Spring 2008	MTE688	688	Ind Rdg Math/Stat Education	MTE	Mathematics Teacher Education	1	Selected topics from the research literature on a particular topic in mathematics and statistics education.	GR	IS	Independent Study
Spring 2008	MTE692	692	Seminar in Math/Stat Education	MTE	Mathematics Teacher Education	1	Reading and discussion of current trends and research in mathematics and statistics education with applications to Pre K-14 mathematics classrooms.	GR	SE	Seminar

Spring 2008	MTE699	699	Sel Topics-Math/Stat Education	MTE	Mathematics Teacher Education	1	Selected topics pertinent to Pre K - 14 mathematics educators.	GR	IS	Independent Study
Spring 2008	MTH126	126	Intermediate Algebra	MTH	Mathematics	5	For students with little or no recent experience with topics beyond elementary algebra. Topics include factoring, algebraic fractions, linear equations and word problems, equations involving fractions, laws of exponents, radicals and principal roots, quadratic equations, equations involving radicals or exponents, and line graphs. Topics covered are the same as in MTH 127, but involve more practice of necessary skills.	UG	LE	Lecture
Spring 2008	MTH127	127	Accelerated Intermed Algebra	MTH	Mathematics	3	Best suited for students who have recent experience with intermediate algebra, but require a review. Topics covered are the same as in MTH 126, but the pace is much faster.	UG	LE	Lecture

Spring 2008	MTH128	128	College Algebra	MTH	Mathematics	5	Best suited for students having little recent experience with topics beyond intermediate algebra or whose mastery of intermediate algebra is less than perfect. Topics covered are the same as in MTH 129 but are accompanied by more practice of necessary skills. In addition, skills learned in intermediate algebra are reinforced and clarified in the context of these more advanced topics.	UG	LE	Lecture
Spring 2008	MTH129	129	Accelerated College Algebra	MTH	Mathematics	3	Best suited for students having little recent experience with topics beyond intermediate algebra or whose mastery of intermediate algebra is less than perfect. Topics covered are the same as in MTH 129 but are accompanied by more practice of necessary skills. In addition, skills learned in intermediate algebra are reinforced and clarified in the context of these more advanced topics.	UG	LE	Lecture
Spring 2008	MTH130	130	Precalculus	MTH	Mathematics	5	Functions and graphs, polynomial and rational functions, conics, systems of equations, exponential and logarithmic functions, geometric series, binomial theorem.	UG	LE	Lecture

Spring 2008	MTH131	131	Trigonometry	MTH	Mathematics	3	Trigonometric and inverse trigonometric functions. Not for credit to students with credit for MTH 134.	UG	LE	Lecture
Spring 2008	MTH134	134	College Algebra II & Trig	MTH	Mathematics	5	Combines the material of MTH 130 and 131 into a single course. Topics covered are the same as in those two courses. Not for credit to students with credit for MTH 130 and/or MTH 131.	UG	LE	Lecture
Spring 2008	MTH143	143	Quantitative Reasoning	MTH	Mathematics	4	Discovery of fundamental concepts and skills of quantitative reasoning by exploring real-world data from many disciplines. Data collection, organization, display, analysis, probability simulation, variation and sampling, and expected values. Students work with appropriate software and graphing calculators.	UG	LE	Lecture
Spring 2008	MTH145	145	Mathematics & The Modern World	MTH	Mathematics	4	An application of mathematics to modeling real world problems from the behavioral, computational, managerial, and social sciences. Includes such topics as graph theory, linear programming, probability, descriptive and inferential statistics, voting systems, game theory, population growth, computer algorithms, and codes and data storage.	UG	LE	Lecture

Spring 2008	MTH200	200	Accelerated Calculus I	MTH	Mathematics	3	This course and MTH 300 cover the material of MTH 229, 230, and 231 at an accelerated pace. Graded pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	MTH228	228	Calc for Mgt Life & Soc Sci	MTH	Mathematics	5	Functions, rates of change, limits, derivatives of algebraic functions, applications including maxima and minima, exponential and logarithmic functions, and indefinite and definite integrals with applications. Not for credit to students with credit for MTH 229 and 230	UG	LE	Lecture
Spring 2008	MTH229	229	Calculus I	MTH	Mathematics	5	Conic sections, functions, limits, continuity, the derivative, derivatives of algebraic and trigonometric functions, and applications of the derivative.	UG	LL	Lecture/Lab Combination
Spring 2008	MTH230	230	Calculus II	MTH	Mathematics	5	Definite integral, antiderivatives, fundamental theorem of calculus. Derivatives of logarithmic, exponential, and inverse trigonometric functions. L'Hoital's rule. Integration techniques. Applications of the definite integral.	UG	LL	Lecture/Lab Combination
Spring 2008	MTH231	231	Calculus III	MTH	Mathematics	5	Applications of the definite integral, polar coordinates, and parametric equations. Infinite series, power series, and vector algebra in the plane and space.	UG	LL	Lecture/Lab Combination

Spring 2008	MTH232	232	Calculus IV	MTH	Mathematics	5	Partial derivatives and definite integrals in the plane and space. Vector functions and their derivatives, motion in space, vector fields, line and surface integrals, Green's theorem, divergence theorem, and Stoke's theorem.	UG	LE	Lecture
Spring 2008	MTH233	233	Differential Equations	MTH	Mathematics	5	Elementary first order equations, linear equations, linear systems, series solutions, Laplace transform, and applications. Uniqueness and existence theorems for solutions.	UG	LE	Lecture
Spring 2008	MTH235	235	Diff Eq with Matrices	MTH	Mathematics	5	Introduction to differential equations with matrix theory. Topics include separable equations, first order equations, matrices, vector spaces, second order linear equations, undetermined coefficents, forced oscillations, eigenvalues, matrix diagonalization, systems of linear equations, Laplace transforms.	UG	LE	Lecture
Spring 2008	MTH243	243	Fundamental Math Concepts I	MTH	Mathematics	4	Overview of mathematical topics from a perspective appropriate for early and middle childhood educators. Covers sets, functions, prenumeration and numeration concepts, properties of whole numbers, integers, and rational numbers. Three hours lecture, one hour lab.	UG	LL	Lecture/Lab Combination

Spring 2008	MTH244	244	Fundamental Math Concepts II	MTH	Mathematics	4	Overview of mathematical topics from a perspective appropriate for early and middle childhood educators. Covers irrational numbers, proportions, introductory geometry, construction, congruence and similarity, and concepts of measurement. Three hours lecture, one hour lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MTH253	253	Elementary Matrix Algebra	MTH	Mathematics	3	Elementary course in matrix theory covering matrices, linear equations, determinants, linear transformations, eigenvalues, and eigenvectors.	UG	LE	Lecture
Spring 2008	MTH255	255	Linear Algebra	MTH	Mathematics	3	In-depth introduction to the basic concepts of linear algebra in real Euclidean n-space. Topics include Gaussian elimination, algebra of matrices, determinants, geometry of Euclidean space, subspaces, linear independence, basis, dimension and rank, and the Gram-Schmidt process.	UG	LE	Lecture
Spring 2008	MTH257	257	Discrete Math for Computing	MTH	Mathematics	3	Discrete mathematics useful in computing. Emphasis on mathematical induction, recurrence relations, asymptotic behavior of functions, and algorithm analysis.	UG	LE	Lecture

Spring 2008	MTH280	280	Intro to Mathematics Proof	MTH	Mathematics	3	Basic notions of logic and techniques used in mathematical proof. Students gain experience in constructing proofs as they study basic notions from sets, relations, functions, algebraic structures, and the properties of real numbers.	UG	LE	Lecture
Spring 2008	MTH280W	280W	Writing in Math 280	MTH	Mathematics	0	Required writing component for MTH 280.	UG	LB	Lab
Spring 2008	MTH290	290	Writing in Mathematics	MTH	Mathematics	3	Explores four aspects of writing in mathematics: expository writing, explaining mathematical ideas; formal writing, making proofs intelligible; writing as a learning tool, clarifying ideas by putting them on paper; and informal writing.	UG	LE	Lecture
Spring 2008	MTH300	300	Accelerated Calculus II	MTH	Mathematics	3	Continuation of MTH 200. Graded pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	MTH303	303	Differential Equations II	MTH	Mathematics	3	Examples of systems of differential equations, complex and repeated eigenvalues, solutions of systems, matrix exponential, qualitative behavior of first order equations, planar systems and stability, almost linear systems, and energy method.	UG	LE	Lecture
Spring 2008	MTH304	304	Advanced Egr Math I	MTH	Mathematics	3	Topics may include ordinary differential equations, linear algebra, orthogonality, Fourier series and integrals, multivariable calculus, and partial differential equations.	UG	LE	Lecture

Spring 2008	MTH305	305	Advanced EGR Math II	MTH	Mathematics	3	Topics may include multivariable calculus, partial differential equations, numerical methods, linear algebra, complex variables, conformal mapping, calculus of variations, and wavelets.	UG	LE	Lecture
Spring 2008	MTH306	306	Mathematical Modeling	MTH	Mathematics	3	Structure and properties of mathematical models. Size effects, dimensional analysis, graphical methods, comparative statistics, stability, optimization techniques, probabilistic models, and Monte Carlo simulation.	UG	LE	Lecture
Spring 2008	MTH310	310	Issues in Science	MTH	Mathematics	3	A writing-intensive course dealing with issues in science.	UG	LE	Lecture
Spring 2008	MTH314	314	Intro To Mathematical Software	MTH	Mathematics	3	Solving scientific problems using computational software packages MATLAB and MATHEMATICA, including procedural and functional programming.	UG	LE	Lecture
Spring 2008	MTH316	316	Nmrcl Methods Dig Comp I	MTH	Mathematics	4	Introduction to numerical methods used in the sciences. Methods of interpolation, data smoothing, functional approximation, integration, solutions of systems of equations, and solutions of ordinary differential equations. Three hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	MTH317	317	Nmrcl Methods Dig Comp II	MTH	Mathematics	4	Introduction to numerical methods used in the sciences. Methods of interpolation, data smoothing, functional approximation, integration, solutions of systems of equations, and solutions of ordinary differential equations. Three hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MTH332	332	Complex Variable	MTH	Mathematics	3	Topics discussed include power series expansion, the formula of Cauchy, residues, conformal mappings, and elementary functions in the complex domain.	UG	LE	Lecture
Spring 2008	MTH333	333	Prtl Dffrntl Equa Bndry Prob	MTH	Mathematics	3	Partial differential equations, boundary value problems, and eigenfunctions. Fourier series, applications.	UG	LE	Lecture
Spring 2008	MTH343	343	Alg & Func-Middle Schl Tchrs	MTH	Mathematics	4	Polynomial, exponential, logarithmic, rational, and trigonometric functions will be studied from a perspective appropriate for a teacher. Computing, programming, graphing, and data collection technology will be used.	UG	LE	Lecture
Spring 2008	MTH344	344	Prob Solving-Middle Schl Tchrs	MTH	Mathematics	4	A framework and useful heuristics for solving problems. Visual thinking and reasoning, metacognition, problem-solving logs and summaries, problem solving individually and in groups.	UG	LE	Lecture

Spring 2008	MTH345	345	Geometry-Middle Schl Teachers	MTH	Mathematics	4	Axioms, finite geometries, nonmetric and metric lengths, angles, area, volume, polygonal figures, and elementary curves.	UG	LL	Lecture/Lab Combination
Spring 2008	MTH348	348	Concepts-Calc-Mid School Tchrs	MTH	Mathematics	4	An exploration and study designed to provide a conceptual understanding of differentiation and integration with examples of their diverse applications and their connections to algebra and geometry.	UG	LL	Lecture/Lab Combination
Spring 2008	MTH355	355	Advanced Linear Algebra	MTH	Mathematics	3	Covers vector spaces and subspaces, basis and dimension, linear transformations and matrices, eigenvalues and eigenvectors, and inner product spaces.	UG	LE	Lecture
Spring 2008	MTH381	381	Elementary Number Theory	MTH	Mathematics	3	Divisibility properties of integers, prime numbers, congruences, the Chinese remainder theorem, quadratic reciprocity law. Mobius inversion formula, Euler f-function, other number-theoretic functions.	UG	LE	Lecture
Spring 2008	MTH399	399	Selected Topics	MTH	Mathematics	1	Selected topics in mathematics. May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	MTH407	407	Optimization Techniques	MTH	Mathematics	3	Concepts of minima and maxima. Linear programming: simplex method, sensitivity, and quality. Transportation and assignment problems. Dynamic programming.	UG	LE	Lecture

Spring 2008	MTH410	410	Theoretical Fndtns-Computing	MTH	Mathematics	4	Turing machines, 5-recursive functions, equivalence of computing paradigms, Church-Turing thesis, undecidability, and intractability.	UG	LE	Lecture
Spring 2008	MTH415	415	Intro - Scientific Computation	MTH	Mathematics	4	In a hands-on multidisciplinary setting, the student will use modern computational techniques for simulating scientific phenomena, running and modifying existing programs.	UG	LE	Lecture
Spring 2008	MTH416	416	Matrix Computations	MTH	Mathematics	4	Survey of numerical methods in linear algebra, emphasizing practice with high-level computer tools. Topics include Gaussian elimination, LU decomposition, numerical eigenvalue problems, QR factorization, least squares, singular value decompositions, and iterative methods.	UG	LE	Lecture
Spring 2008	MTH419	419	Cryptography & Data Security	MTH	Mathematics	3	Introduction to the mathematical principles of data security. Various developments in cryptography will be discussed, including public-key encryption, digital signatures, the data encryption standard (DES), and key safeguarding schemes.	UG	LE	Lecture

Spring 2008	MTH423	423	Advanced Logic	MTH	Mathematics	3	Listed jointly with Department of Philosophy; see PHL 423. Treats logis as an object rather than a subject. Contains extensions to higher order logic, but mainly emphasizes the use of logic and the limitations of logical systems.	UG	LE	Lecture
Spring 2008	MTH431	431	Real Variables I	MTH	Mathematics	3	Functions, sequences, limits, continuity, differentiability, integration, and mean-value theorems.	UG	LE	Lecture
Spring 2008	MTH432	432	Real Variables II	MTH	Mathematics	3	Infinite series, uniform convergence. Taylor series, improper integrals, special functions, and Fourier series.	UG	LE	Lecture
Spring 2008	MTH433	433	Real Variables III	MTH	Mathematics	3	Theory of functions of several variables, vector-valued functions.	UG	LE	Lecture
Spring 2008	MTH434	434	Intro to Complex Analysis	MTH	Mathematics	5	Complex arithmetic, differentiation (analytic functions, the Cauchy-Riemann equations), elementary functions and their mapping properties, integration (Cauchy s theorem, Cauchy integral formula), Taylor and Laurent series, poles, residues, and the residue theorem.	UG	LE	Lecture
Spring 2008	MTH440	440	History of Mathematics	MTH	Mathematics	3	Development of calculus from antiquity through Newton, Leibnitz, development of classical analysis; the rise of abstraction; set theory, algebra, and topology; modern analysis.	UG	LE	Lecture

Spring 2008	MTH440W	440W	Writing in Math	MTH	Mathematics	0		UG	LB	Lab
Spring 2008	MTH446	446	Mthmtcl Mdlng-Mid Schl Tchrs	MTH	Mathematics	4	An introduction to mathematical modeling by modeling real world problems individually and in groups. Focuses on working with the steps involved in modeling a real-life situation and understanding how modeling differs from simple problem solving.	UG	LE	Lecture
Spring 2008	MTH450	450	Discrete Algebraic Structures	MTH	Mathematics	3	Introduction to several abstract algebraic structures and their models that are used in computer science. Examples include semigroups and finite-state machines, and groups and codes.	UG	LE	Lecture
Spring 2008	MTH451	451	Intro to Modern Algebra I	MTH	Mathematics	3	Introduction to abstract algebraic structures including groups, rings, integral domains, and fields.	UG	LE	Lecture
Spring 2008	MTH452	452	Intro to Modern Algebra II	MTH	Mathematics	3	Introduction to abstract algebraic structures including groups, rings, integral domains, and fields.	UG	LE	Lecture
Spring 2008	MTH456	456	Coding Theory	MTH	Mathematics	3	Examines the essentials of error-correcting codes and the study of methods for efficient and accurate transfer of information. Topics to be covered include basic concepts, perfect and related codes, cyclic codes, and BCH codes.	UG	LE	Lecture

Spring 2008	MTH457	457	Combinatorics	MTH	Mathematics	3	Topics are permutations, combinatorics, generating functions, recurrence relations, and Polya's theory of counting.	UG	LE	Lecture
Spring 2008	MTH458	458	Applied Graph Theory	MTH	Mathematics	3	Introduction to methods, results, and algorithms of graph theory. Emphasis on graphs as mathematical models applicable to organizational and industrial situations.	UG	LE	Lecture
Spring 2008	MTH459	459	Combinatorial Tools-Comp Sci	MTH	Mathematics	3	Introduction to some of the mathematical tools needed for an understanding of computer programming. The topics covered are summations, elementary number theory, combinatorial identities, generating functions, and asymptotics.	UG	LE	Lecture
Spring 2008	MTH471	471	Geometry	MTH	Mathematics	3	Topics in foundations of Euclidean geometry, introduction to non-Euclidean and other geometries.	UG	LE	Lecture
Spring 2008	MTH472	472	Projective Geometry	MTH	Mathematics	3	Projective and affine planes and spaces, change of coordinates, projective transformations, and conics.	UG	LE	Lecture
Spring 2008	MTH475	475	Differential Geometry	MTH	Mathematics	4	Calculus on Euclidean space frame fields, calculus on a surface, shape operators, and geometry of surfaces in Euclidean three space.	UG	LE	Lecture

Spring 2008	MTH476	476	Computer Graphics I	MTH	Mathematics	4	Contents: raster graphics algorithms, geometric primitives and their attributes, clipping, antialiasing, geometric transformations, structures and hierarchical modes, input devices, and interactive techniques. Students develop interrelated programs to design, manipulate, and view a three-dimensional hierarchical model.	UG	LE	Lecture
Spring 2008	MTH477	477	Computer Graphics II	MTH	Mathematics	4	Continuation of MTH 476. Covers surface rendering, hidden line and surface removal, illumination models, texture mapping, color models, geometric modeling, and graphical interface design. Students develop programs and a final project.	UG	LE	Lecture
Spring 2008	MTH480	480	Mthds Appl Math:Geomtrc Mthds	MTH	Mathematics	3		UG	LE	Lecture
Spring 2008	MTH481	481	Mthds Appl Math:Diff Equations	MTH	Mathematics	3	Solution methods for ordinary differential equations commonly arising in physics and engineering. Systems of equations, stability theory, Liapunov's methods, autonomous systems, existence and uniqueness of solutions, Poincare phase plan.	UG	LE	Lecture

Spring 2008	MTH482	482	Mthds Appl Math:Integral Mthds	MTH	Mathematics	3	Use of integral transforms in the solution of differential and integral equations. Fourier series, Fourier and Laplace transforms, distributions, integral equations, Greens functions, Sturm-Liouville theory, perturbation methods and asymptotics, orthogonal functions, special functions.	UG	LE	Lecture
Spring 2008	MTH488	488	Independent Reading	MTH	Mathematics	1	Topics vary.	UG	IS	Independent Study
Spring 2008	MTH491	491	UG Math Education Seminar	MTH	Mathematics	3	Detailed study of the connections within mathematics and between mathematics and school mathematics. May be taken for letter grade or pass/unsatisfactory.	UG	SE	Seminar
Spring 2008	MTH491W	491W	Writing in MTH	MTH	Mathematics	0		UG	LB	Lab
Spring 2008	MTH492	492	UG Mathematics Seminar	MTH	Mathematics	3	Detailed study of a single mathematics topic chosen by the student with the approval of the instructor. The student will present the results of the study in an expository paper submitted to the instructor, and also present them to a broader audience.	UG	SE	Seminar
Spring 2008	MTH492W	492W	Writing in MTH	MTH	Mathematics	0		UG	LB	Lab
Spring 2008	MTH499	499	Selected Topics	MTH	Mathematics	1	Selected topics in mathematics.	UG	IS	Independent Study

Spring 2008	MTH503	503	Differential Equations II	MTH	Mathematics	3	Examples of systems of differential equations, complex and repeated eigenvalues, solutions of systems, matrix exponential, qualitative behavior of first-order equations, planar systems and stability, almost linear systems, and energy methods.	GR	LE	Lecture
Spring 2008	MTH504	504	Adv Egr Mth I	MTH	Mathematics	3	Topics may include ordinary differential equations, linear algebra orthogonality, Fourier series and integrals, multivariable calculus, and partial differential equations.	GR	LE	Lecture
Spring 2008	MTH505	505	Adv Egr Mth II	MTH	Mathematics	3	Topics may include multivariable calculus, partial differential equations, numerical methods, linear algebra, complex variables, conformal mapping, calculus of variations, and wavelets.	GR	LE	Lecture
Spring 2008	MTH516	516	Num Meth-Digital Comp I	MTH	Mathematics	4	Introduction to numerical methods used in the sciences. Includes methods of interpolation, data smoothing, functional approximation, integration, solutions of systems of equations, and solutions of ordinary differential equations. 3 hours lecture, 2 hours lab	GR	LL	Lecture/Lab Combination

Spring 2008	MTH517	517	Num Meth-Digital Comp II	MTH	Mathematics	4	An introduction to numerical methods used in the sciences. Includes methods of interpolation, data smoothing, functional approximation, integration, solutions of systems of equations, and solutions of ordinary differential equations.	GR	LL	Lecture/Lab Combination
Spring 2008	MTH532	532	Complex Variables	MTH	Mathematics	3	Topics discussed include power series expansion, the formula of Cauchy, residues, conformal mappings, and elementary functions in the complex domain.	GR	LE	Lecture
Spring 2008	MTH533	533	Part Dffrn Equa-Bndrs Val Prob	MTH	Mathematics	3	Partial differential equations, boundary value problems, eigenfunctions, Fourier series, and applications.	GR	LE	Lecture
Spring 2008	MTH581	581	Elementary Number Theory	MTH	Mathematics	3	Divisibility properties of integers, prime numbers, congruences, the Chinese remainder theorem, quadratic reciprocity law, Mobius inversion formula, Euler f-function, other number-theoretic functions.	GR	LE	Lecture
Spring 2008	MTH599	599	Selected Topics	MTH	Mathematics	1	Selected topics in mathematics. May be taken for letter grade or pass/unsatisfactory.	GR	IS	Independent Study

Spring 2008	MTH603	603	Adv Engineering Mathematics I	MTH	Mathematics	4	Ordinary differential equations, linear algebra, systems and qualitative theory of ordinary differential equations, numerical methods, Fourier series and integrals, Fourier and Laplace transforms, partial differential equations, vector spaces.	GR	LE	Lecture
Spring 2008	MTH604	604	Adv Engineering Mathematics II	MTH	Mathematics	4	Linear transformations, applications and properties of matrices, vector calculus, calculus of variations, functions of a complex variable, series, residues, poles, stability, conformal mapping.	GR	LE	Lecture
Spring 2008	MTH606	606	Mathematical Modeling	MTH	Mathematics	3	Structure and properties of mathematical models. Size effects, dimensional analysis, graphical methods, comparative statics, stability, optimization techniques, probabilistic models, and Monte Carlo simulation.	GR	LE	Lecture
Spring 2008	MTH607	607	Optimization Techniques	MTH	Mathematics	3	Concepts of minima and maxima; linear programming; simplex method, sensitivity, and duality; transportation and assignment problems; and dynamic programming.	GR	LE	Lecture
Spring 2008	MTH610	610	Theoretical Fndtns-Computing	MTH	Mathematics	4	Turing machines; m-recursive functions; equivalence of computing paradigms; Church-Turing thesis; undecidability; intractability. 3 hours lecture, 2 hours lab.	GR	LE	Lecture

Spring 2008	MTH614	614	Intro to Mathematical Software	MTH	Mathematics	3	Solving scientific problems using computational software packages MATLAB and MATHEMATICA, including procedural and functional programming.	GR	LE	Lecture
Spring 2008	MTH615	615	Intro-Scientific Computation	MTH	Mathematics	4	In a hands-on multidisciplinary setting, the student will use modern computational techniques to simulate phenomena, running and modifying existing programs.	GR	LE	Lecture
Spring 2008	MTH616	616	Matrix Computations	MTH	Mathematics	4	Survey of numerical methods in linear algebra emphasizing practice with high-level computer tools. Topics include Gaussian elimination, LU decomposition, numerical eigenvalue problems, QR factorization, least squares, singular value decompositions, and iterative methods.	GR	LE	Lecture
Spring 2008	MTH619	619	Cryptography & Data Security	MTH	Mathematics	3	Introduces the mathematical principles of data security. Various developments in cryptography discussed, including public-key encryption, digital signatures, data encryption standard (DES), and key safeguarding schemes.	GR	LE	Lecture

Spring 2008	MTH623	623	Advanced Logic	MTH	Mathematics	3	(Offered jointly with the Department of Philosophy.) This course treats logic as an object rather than a subject. Although it contains extensions to higher order logic, its main concern will be with the use of logic and with the limitations of logical systems.	GR	LE	Lecture
Spring 2008	MTH631	631	Real Variables	MTH	Mathematics	3	Functions, sequences, limits, continuity, differentiability, integration, and mean-value theorems.	GR	LE	Lecture
Spring 2008	MTH632	632	Real Variables II	MTH	Mathematics	3	Infinite series, uniform convergence, Taylor series, improper integrals, special functions, and Fourier series.	GR	LE	Lecture
Spring 2008	MTH633	633	Real Variables III	MTH	Mathematics	3	Theory of functions of several variables and vector-valued functions.	GR	LE	Lecture
Spring 2008	MTH634	634	Intro to Complex Analysis	MTH	Mathematics	5	Complex arithmetic, differentiation (analytic functions, the Cauchy-Riemann equations), elementary functions and their mapping properties, integration (Cauchy's theorem, Cauchy integral Formula), Taylor and Laurent series, poles, residues, the residue theorem.	GR	LE	Lecture

Spring 2008	MTH650	650	Descrete Algebraic Structures	MTH	Mathematics	3	Introduces several abstract algebraic structures and their models that are used in computer science. Examples include semigroups, finite-state machines, and groups and cod.	GR	LE	Lecture
Spring 2008	MTH651	651	Intro to Modern Algebra I	MTH	Mathematics	3	Introduction to abstract algebraic structures including groups, rings, integral domains, and fields.	GR	LE	Lecture
Spring 2008	MTH652	652	Intro to Modern Algebra II	MTH	Mathematics	3	Introduction to abstract algebraic structures including groups, rings, integral domains, and fields.	GR	LE	Lecture
Spring 2008	MTH655	655	Advanced Linear Algebra	MTH	Mathematics	3	Vector spaces and subspaces, basis and dimension, linear transformations and matrices, eigenvalues and eigenvectors, inner product spaces.	GR	LE	Lecture
Spring 2008	MTH656	656	Coding Theory	MTH	Mathematics	3	Introduction to the essentials of error-correcting codes, the study of methods for efficient and accurate transfer of information. Topics covered include basic concepts, perfect and related codes, cyclic codes, and BCH codes.	GR	LE	Lecture
Spring 2008	MTH657	657	Combinatorics	MTH	Mathematics	3	Topics from permutations, combinatorics, generating functions, recurrence relations, and Polya's theory of counting.	GR	LE	Lecture

Spring 2008	MTH658	658	Applied Graph Theory	MTH	Mathematics	3	Introduction to methods, results, and algorithms from graph theory. Emphasis on graphs as mathematical models applicable to organizational and industrial situations.	GR	LE	Lecture
Spring 2008	MTH659	659	Combinatorial Tools-Comp Sci	MTH	Mathematics	3	Introduction to some of the mathematical tools needed for an understanding of computer programming. Topics covered are summations, elementary number theory, combinatorial identities, generating functions, and asymptotics.	GR	LE	Lecture
Spring 2008	MTH671	671	Geometry	MTH	Mathematics	3	Topics in the foundation of Euclidean geometry, introduction to non-Euclidean and other geometries.	GR	LE	Lecture
Spring 2008	MTH672	672	Projective Geometry	MTH	Mathematics	3	Projective and affine planes and spaces. Change of coordinates. Projective transformations. Conics.	GR	LE	Lecture
Spring 2008	MTH675	675	Differential Geometry	MTH	Mathematics	4	Calculus on Euclidean space, Frame fields, calculus on a surface, shape operators, and geometry of surfaces in Euclidean 3 space.	GR	LE	Lecture
Spring 2008	MTH680	680	Meth Appl Mth:Geometric Meth	MTH	Mathematics	3	Basic mathematical tools for the description of physical systems in three dimensions. Vector and tensor analysis, curvilinear coordinate systems, calculus of variations, Lagrangian mechanics, Lagrange multipliers.	GR	LE	Lecture

Spring 2008	MTH681	681	Meth Appl Mth:Diff Equation	MTH	Mathematics	3	Solution methods for ordinary differential equations commonly arising in physics and engineering. Systems of equations, stability theory, Liapunov's methods, autonomous systems, existence and uniqueness of solutions, Poincare phase plane.	GR	LE	Lecture
Spring 2008	MTH682	682	Meth Appl Mth:Integral Methods	MTH	Mathematics	3	Use of integral transforms in the solution of differential and integral equations. Fourier series, Fourier and Laplace transforms distributions, integral equations, Greens functions, Sturm-Liouville theory, perturbation methods and asymptotics, orthogonal functions, special functions.	GR	LE	Lecture
Spring 2008	MTH688	688	Independent Reading	MTH	Mathematics	1	Titles vary.	GR	IS	Independent Study
Spring 2008	MTH692	692	Seminar	MTH	Mathematics	1	Reading and discussion of current trends and research in mathematics and statistics education with applications to PreK-14 mathematics classrooms.	GR	SE	Seminar
Spring 2008	MTH699	699	Selected Topics	MTH	Mathematics	1	Selected topics in mathematics.	GR	IS	Independent Study
Spring 2008	MTH700	700	Principles-Instruction in Math	MTH	Mathematics	3	Survey of available instructional materials and discussion of educational theory and techniques leading to more effective instruction.	GR	SE	Seminar

Spring 2008	MTH716	716	Numerical Analysis I	MTH	Mathematics	4	Topics chosen with emphasis on computational linear algebra. Systems of linear equations and Gaussian elimination; computation of eigenvalues and eigenvectors; matrix exponential; norm and condition number; and iterative methods.	GR	LE	Lecture
Spring 2008	MTH717	717	Numerical Analysis II	MTH	Mathematics	4	Finite difference methods for partial differential equations; analysis of stability and convergence.	GR	LE	Lecture
Spring 2008	MTH718	718	Numerical Analysis	MTH	Mathematics	4	Finite element methods for elliptic boundary value problems, analysis of errors, approximation by finite element spaces, effects of curved boundaries, numerical integration, and finite element methods for parabolic problems.	GR	LE	Lecture
Spring 2008	MTH725	725	Computational Logic	MTH	Mathematics	4	Introduces predicate logic as an inference system, emphasizing refutation procedures, problem reduction, and resolution. A basis for studying logic programming and artificial intelligence.	GR	LE	Lecture
Spring 2008	MTH730	730	Principles of Analysis	MTH	Mathematics	4	Metric spaces: convergence, completeness, compactness, Ascoli-Arzela theorem. Stone-Weierstrass theorem. Banach spaces. Dual of Lp, of C[a,b].	GR	LE	Lecture

Spring 2008	MTH731	731	Real Analysis I	MTH	Mathematics	4	Lebesque measure and integration on the real line. Convergence theorems, differentiation of integrals, functions of bounded variation, and absolute continuity.	GR	LE	Lecture
Spring 2008	MTH732	732	Real Analysis II	MTH	Mathematics	4	LP spaces and their bounded linear functionals. Banach spaces, Hahn-Banach theorem, and closed-graph theorem. Hilbert space, Riesz representation theorem, orthonormal bases, and general measure spaces.	GR	LE	Lecture
Spring 2008	MTH733	733	Real Analysis III	MTH	Mathematics	4	Outer measure, measure, integration, general convergence theorems, Radon-Nikodym theorem, product measure, and Fubini's theorem.	GR	LE	Lecture
Spring 2008	MTH739	739	Complex Analysis III	MTH	Mathematics	4		GR	LE	Lecture
Spring 2008	MTH751	751	Algebra I	MTH	Mathematics	4	Group theory-isomorphism theorems, Jordan-Holder theorem, permutation groups, Sylow theorems, finitely generated Abelian groups, and free groups.	GR	LE	Lecture
Spring 2008	MTH752	752	Algebra II	MTH	Mathematics	4	Ring theory-polynomial rings, unique factorization, radicals, and Wedderburn-Artin structure theory.	GR	LE	Lecture
Spring 2008	MTH753	753	Algebra III	MTH	Mathematics	4	Field theory-simple extensions, Galois theory, solvability by radicals, cyclotomy, finite fields, and Wedderburn's theorem.	GR	LE	Lecture

Spring 2008	MTH771	771	Topology	MTH	Mathematics	4		GR	LE	Lecture
Spring 2008	MTH777	777	Applied Analysis I	MTH	Mathematics	4	Function spaces, differential and integral equations, fixed point theorems, Hilbert spaces, compact operators, eigenvalues, eigenfunction expansions, and Sturm-Liouville problems.	GR	LE	Lecture
Spring 2008	MTH778	778	Applied Analysis II	MTH	Mathematics	4	Inverse operators, fixed-point theorems, compactness, variational methods, and functional analysis of numerical methods.	GR	LE	Lecture
Spring 2008	MTH789	789	Continuing Registration	MTH	Mathematics	1		GR	IS	Independent Study
Spring 2008	MTH792	792	Special Problems	MTH	Mathematics	1	Titles vary.	GR	IS	Independent Study
Spring 2008	MTH799	799	Selected Topics	MTH	Mathematics	1	Selected topics in mathematics.	GR	IS	Independent Study
Spring 2008	MTH800	800	Grad Seminar	MTH	Mathematics	1		GR	SE	Seminar
Spring 2008	MTH830	830	Topics in Analysis-Mod Fndtns	MTH	Mathematics	1		GR	IS	Independent Study
Spring 2008	MTH850	850	Topics in Algebra	MTH	Mathematics	1		GR	IS	Independent Study
Spring 2008	MTH870	870	Topics in Geometry	MTH	Mathematics	1		GR	IS	Independent Study
Spring 2008	MTH899	899	Graduate Research	MTH	Mathematics	1	Titles vary.	GR	IS	Independent Study

Spring 2008	MUA110	110	Applied Music	MUA	Music: Applied Music	1	Applied music instruction is available to the general student, regardless of major. Section number designates applied area. Audition required. Half-hour lesson only. Enrollment limited. Department permission required.	UG	IS	Independent Study
Spring 2008	MUA111	111	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA112	112	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA113	113	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA121	121	Applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study

Spring 2008	MUA122	122	Applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA123	123	Applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA141	141	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA142	142	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA143	143	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA211	211	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study

Spring 2008	MUA212	212	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA213	213	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA221	221	Applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA222	222	Applied Music	MUA	Music: Applied Music	2		UG	IS	Independent Study
Spring 2008	MUA223	223	Applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA241	241	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study

Spring 2008	MUA242	242	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA243	243	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA311	311	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA312	312	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA313	313	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA321	321	Applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study

Spring 2008	MUA322	322	Applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA323	323	applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA341	341	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA342	342	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA343	343	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA399	399	Junior Recital	MUA	Music: Applied Music	0	A solo concert performance on the major instrument during the junior year.	UG	IS	Independent Study

Spring 2008	MUA411	411	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA412	412	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA413	413	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA421	421	Applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA422	422	Applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA423	423	Applied Music	MUA	Music: Applied Music	2		UG	IS	Independent Study

Spring 2008	MUA441	441	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA442	442	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA443	443	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	IS	Independent Study
Spring 2008	MUA499	499	Senior Recital	MUA	Music: Applied Music	0	A solo concert performance on the major instrument during the senior year.	UG	IS	Independent Study
Spring 2008	MUA710	710	Applied Music	MUA	Music: Applied Music	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	GR	IS	Independent Study
Spring 2008	MUA720	720	Applied Music	MUA	Music: Applied Music	2	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	GR	IS	Independent Study

Spring 2008	MUA740	740	Applied Music	MUA	Music: Applied Music	4	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	GR	IS	Independent Study
Spring 2008	MUE205	205	Chamber Music	MUE	Music: Ensembles	1	Audition required.	UG	LE	Lecture
Spring 2008	MUE244	244	University Brass Choir	MUE	Music: Ensembles	1	A performance-oriented group which provides the student with chamber brass music experience. Students learn elements of ensemble execution, professionalism, brass music history, orchestral styles, and sound production. Audition required.	UG	LE	Lecture
Spring 2008	MUE245	245	Collegium Musicum	MUE	Music: Ensembles	1	Collegium Musicum is the generic term for an instrumental and vocal ensemble devoted to the study and performance of early music, that was written before 1750. One period (Medieval, Renaissance, Baroque) will be emphasized each quarter.	UG	LE	Lecture
Spring 2008	MUE246	246	University Saxophone Quartet	MUE	Music: Ensembles	1	Performs saxophone quartet repertoire ranging from classic to jazz to contemporary. Audition and course instructor permission required.	UG	LE	Lecture
Spring 2008	MUE247	247	University Flute Choir	MUE	Music: Ensembles	1	Performs music of all time periods and styles originally composed for this instrumentation as well as transcriptions of masterworks.	UG	LE	Lecture

Spring 2008	MUE248	248	University Clarinet Choir	MUE	Music: Ensembles	1	Performs music of all time periods and styles originally composed for this instrumentation as well as transcriptions of masterworks.	UG	LE	Lecture
Spring 2008	MUE249	249	Chamber Players	MUE	Music: Ensembles	1	Exploration of performance repertoire composed expressly for small wind ensemble. Works by such composers as Mozart, Strauss, Dvorak, Beethoven, and Stravinsky. Consent of conductor and student's applied instructor required.	UG	LE	Lecture
Spring 2008	MUE266	266	Concert Band	MUE	Music: Ensembles	1	Performs band music of all styles. Open to all students without audition.	UG	LE	Lecture
Spring 2008	MUE267	267	Pep Band	MUE	Music: Ensembles	1	Performs jazz, rock, and contemporary music at all home basketball games and for other campus activities. Audition required.	UG	LE	Lecture
Spring 2008	MUE268	268	Jazz Band	MUE	Music: Ensembles	1	A jazz performance-oriented group. Students learn elements of ensemble execution, professionalism, jazz history, jazz styles, and jazz improvisation. Audition required.	UG	LE	Lecture
Spring 2008	MUE269	269	Wind Symphony	MUE	Music: Ensembles	1	Performs original compositions and transcriptions for band and wind ensembles. Audition required.	UG	LE	Lecture
Spring 2008	MUE270	270	Univ Symphony Orchestra	MUE	Music: Ensembles	1	Performs orchestral music of all styles and periods.	UG	LE	Lecture

Spring 2008	MUE277	277	Chamber Orchestra	MUE	Music: Ensembles	1	Instrumental ensemble, consisting primarily of strings and varying combinations of wind and percussion instruments, devoted to the study and performance of music written for that medium.	UG	LE	Lecture
Spring 2008	MUE290	290	University Chorus	MUE	Music: Ensembles	1	Development of choral and vocal skills. Choral literature from a wide range of historical and compositional styles. No audition required.	UG	LE	Lecture
Spring 2008	MUE292	292	Vocal Jazz Ensemble	MUE	Music: Ensembles	1	Development of performance skills in vocal jazz. Emphasis on jazz style and techniques, improvisation, and jazz theory. Audition required.	UG	LE	Lecture
Spring 2008	MUE293	293	University Men's Chorale	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced choral literature from a wide range of historical and compositional styles. Audition required.	UG	LE	Lecture
Spring 2008	MUE294	294	University Women's Chorale	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced choral literature from a wide range of historical and compositional styles. Audition required.	UG	LE	Lecture
Spring 2008	MUE295	295	Chamber Singers	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced vocal chamber literature from 15th through 20th centuries. Audition required.	UG	LE	Lecture

Spring 2008	MUE297	297	Paul L. Dunbar Chorale	MUE	Music: Ensembles	1	A choral ensemble for students who desire to explore the musical style of gospel music and its roots and various forms. Includes performances of a body of literature associated with the African American church to the university and surrounding communities.	UG	LE	Lecture
Spring 2008	MUE299	299	Collegiate Chorale	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced choral concert repertoire representing a wide range of historical and compositional styles. Audition required.	UG	LE	Lecture
Spring 2008	MUE405	405	Chamber Music	MUE	Music: Ensembles	1	Audition required.	UG	LE	Lecture
Spring 2008	MUE444	444	University Brass Choir	MUE	Music: Ensembles	1	A performance-oriented group which provides students with chamber brass music experience. Students learn elements of ensemble execution, professionalism, brass music history, orchestral styles, and sound production. Audition required.	UG	LE	Lecture
Spring 2008	MUE445	445	Collegium Musicum	MUE	Music: Ensembles	1	Collegium Musicum is the generic term for an instrumental and vocal ensemble devoted to the study and performance of early music, that was written before 1750. One period (Medieval, Renaissance, Baroque) will be emphasized each quarter.	UG	LE	Lecture

Spring 2008	MUE446	446	University Saxophone Quartet	MUE	Music: Ensembles	1	Performs saxophone quartet repertoire ranging from classic to jazz to contemporary. Audition and course instructor permission required.	UG	LE	Lecture
Spring 2008	MUE447	447	University Flute Choir	MUE	Music: Ensembles	1	Performs music of all time periods and styles originally composed for this instrumentation as well as transcriptions of masterworks.	UG	LE	Lecture
Spring 2008	MUE448	448	University Clarinet Choir	MUE	Music: Ensembles	1	Performs music of all time periods and styles originally composed for this instrumentation as well as transcriptions of masterworks.	UG	LE	Lecture
Spring 2008	MUE449	449	Chamber Players	MUE	Music: Ensembles	1	Open only to music majors or minors. All students must have auditioned for and have received departmental approval before registering for applied music.	UG	LE	Lecture
Spring 2008	MUE466	466	Concert Band	MUE	Music: Ensembles	1	Performs band music of all styles. Open to all students without audition.	UG	LE	Lecture
Spring 2008	MUE467	467	Pep Band	MUE	Music: Ensembles	1	Performs jazz, rock, and contemporary music at all home basketball games and for other campus activities. Audition required.	UG	LE	Lecture
Spring 2008	MUE468	468	Jazz Band	MUE	Music: Ensembles	1	A jazz performance-oriented group. Students learn elements of ensemble execution, professionalism, jazz history, jazz styles, and jazz improvisation. Audition required.	UG	LE	Lecture

Spring 2008	MUE469	469	Wind Symphony	MUE	Music: Ensembles	1	Performs original compositions and transcriptions for band and wind ensembles. Audition required.	UG	LE	Lecture
Spring 2008	MUE470	470	Univ Symphony Orchestra	MUE	Music: Ensembles	1	Performs orchestral music of all styles and periods.	UG	LE	Lecture
Spring 2008	MUE477	477	Chamber Orchestra	MUE	Music: Ensembles	1	Instrumental ensemble, consisting primarily of strings and varying combinations of wind and percussion instruments, devoted to the study and performance of music written for that medium. Audition required.	UG	LE	Lecture
Spring 2008	MUE490	490	University Chorus	MUE	Music: Ensembles	1	Development of choral and vocal skills. Choral literature from a wide range of historical and compositional styles. No audition required.	UG	LE	Lecture
Spring 2008	MUE492	492	Vocal Jazz Ensemble	MUE	Music: Ensembles	1	Development of performance skills in vocal jazz. Emphasis on jazz style and techniques, improvisation, and jazz theory. Audition required.	UG	LE	Lecture
Spring 2008	MUE493	493	University Men's Chorale	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced choral literature from a wide range of historical and compositional styles. Audition required.	UG	LE	Lecture
Spring 2008	MUE494	494	University Women's Chorale	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced choral literature from a wide range of historical and compositional styles. Audition required.	UG	LE	Lecture

Spring 2008	MUE495	495	Chamber Singers	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced vocal chamber literature from 15th through 20th centuries. Audition required.	UG	LE	Lecture
Spring 2008	MUE497	497	Paul L. Dunbar Chorale	MUE	Music: Ensembles	1	A choral ensemble exploring the musical style of gospel music and its roots and various forms. Includes on- and off-campus performances of a body of literature associated with the African American church. Audition required.	UG	LE	Lecture
Spring 2008	MUE499	499	Collegiate Chorale	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced choral concert repertoire representing a wide range of historical and compositional styles. Audition required.	UG	LE	Lecture
Spring 2008	MUE605	605	Chamber Music	MUE	Music: Ensembles	1	Audition required.	GR	LE	Lecture
Spring 2008	MUE644	644	University Brass Choir	MUE	Music: Ensembles	1	A performance-oriented group which provides students with chamber brass music experience. Students learn elements of ensemble execution, professionalism, brass music history, orchestral styles, and sound production. Audition required.	GR	LE	Lecture

Spring 2008	MUE645	645	Collegium Musicum	MUE	Music: Ensembles	1	Collegium Musicum is the generic term for an instrumental and vocal ensemble devoted to the study and performance of early music, that was written before 1750. One period (Medieval, Renaissance, Baroque) will be emphasized each quarter.	GR	LE	Lecture
Spring 2008	MUE646	646	University Saxophone Quartet	MUE	Music: Ensembles	1	Performs saxophone quartet repertoire ranging from classic to jazz to contemporary. Audition and course instructor permission required.	GR	LE	Lecture
Spring 2008	MUE647	647	University Flute Choir	MUE	Music: Ensembles	1	Performs music of all time periods and styles originally composed for this instrumentation as well as transcriptions of masterworks.	GR	LE	Lecture
Spring 2008	MUE648	648	University Clarinet Choir	MUE	Music: Ensembles	1	Performs music of all time periods and styles originally composed for this instrumentation as well as transcriptions of masterworks.	GR	LE	Lecture
Spring 2008	MUE649	649	Chamber Players	MUE	Music: Ensembles	1	Exploration of performance repertoire composed expressly for small wind ensemble. Works by such composers as Mozart, Strauss, Dvorak, Beethoven, and Stravinsky. Consent of conductor and student's applied instructor required.	GR	LE	Lecture
Spring 2008	MUE666	666	Concert Band	MUE	Music: Ensembles	1	Performs band music of all styles. Open to all students without audition.	GR	LE	Lecture

Spring 2008	MUE667	667	Pep Band	MUE	Music: Ensembles	1	Performs jazz, rock, and contemporary music at all home basketball games and for other campus activities. Audition required.	GR	LE	Lecture
Spring 2008	MUE668	668	Jazz Band	MUE	Music: Ensembles	1	A jazz performance-oriented group. Students learn elements of ensemble execution, professionalism, jazz history, jazz styles, and jazz improvisation. Audition required.	GR	LE	Lecture
Spring 2008	MUE669	669	Wind Symphony	MUE	Music: Ensembles	1	Performs original compositions and transcriptions for band and wind ensembles. Audition required.	GR	LE	Lecture
Spring 2008	MUE670	670	University Symphony Orchestra	MUE	Music: Ensembles	1	Performs orchestral music of all styles and periods.	GR	LE	Lecture
Spring 2008	MUE677	677	Chamber Orchestra	MUE	Music: Ensembles	1	Instrumental ensemble, consisting primarily of strings and varying combinations of wind and percussion instruments, devoted to the study and performance of music written for that medium.	GR	LE	Lecture
Spring 2008	MUE690	690	University Chorus	MUE	Music: Ensembles	1	Development of choral and vocal skills. Choral literature from a wide range of historical and compositional styles. No audition required.	GR	LE	Lecture
Spring 2008	MUE692	692	Vocal Jazz Ensemble	MUE	Music: Ensembles	1	Development of performance skills in vocal jazz. Emphasis on jazz style and techniques, improvisation, and jazz theory. Audition required.	GR	LE	Lecture

Spring 2008	MUE693	693	University Men's Chorale	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced choral literature from a wide range of historical and compositional styles. Audition required.	GR	LE	Lecture
Spring 2008	MUE694	694	University Women's Chorale	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced choral literature from a wide range of historical and compositional styles. Audition required.	GR	LE	Lecture
Spring 2008	MUE695	695	Chamber Singers	MUE	Music: Ensembles	1	Development of advanced choral and vocal skills. Emphasis on advanced vocal chamber literature from 15th through 20th centuries. Audition required.	GR	LE	Lecture
Spring 2008	MUE697	697	Paul Laurence Dunbar Chorale	MUE	Music: Ensembles	1	A choral ensemble for students who desire to explore the musical style of gospel music and its roots and various forms. Includes performances of a body of literature associated with the African American church to the university and surrounding communities.	GR	LE	Lecture
Spring 2008	MUE699	699	Collegiate Chorale	MUE	Music: Ensembles	1	Development of choral and vocal skills. Emphasis on aadvanced choral concert repertoire representing a wide range of historical and compositional styles. Audition required.	GR	LE	Lecture
Spring 2008	MUS100	100	Recitals	MUS	Music	0		UG	LB	Lab

Spring 2008	MUS101	101	Theory of Music	MUS	Music	3	Theoretical study of music including written exercises, form and analysis, and harmony.	UG	LE	Lecture
Spring 2008	MUS102	102	Theory of Music	MUS	Music	3	Theoretical study of music including written exercises, form and analysis, and harmony.	UG	LE	Lecture
Spring 2008	MUS103	103	Theory of Music	MUS	Music	3	Theoretical study of music including written exercises, form and analysis, and harmony.	UG	LE	Lecture
Spring 2008	MUS111	111	Vocal Technique and Diction	MUS	Music	1	Vocal English and Italian diction taught with an emphasis on the IPA phonetic language. Discussion and development of vocal technique, terminology, and anatomy.	UG	LE	Lecture
Spring 2008	MUS112	112	Vocal Technique and Diction	MUS	Music	1	Vocal English and Italian diction taught with an emphasis on the IPA phonetic language. Discussion and development of vocal technique, terminology, and anatomy.	UG	LE	Lecture
Spring 2008	MUS113	113	Vocal Technique and Diction	MUS	Music	1	Vocal English and Italian diction taught with an emphasis on the IPA phonetic language. Discussion and development of vocal technique, terminology, and anatomy.	UG	LE	Lecture
Spring 2008	MUS114	114	Fundamentals of Music Theory	MUS	Music	3	Study of basic materials, notation, and reading of music for students with little or no previous music training.	UG	LE	Lecture

Spring 2008	MUS117	117	Music Listening IV: Jazz	MUS	Music	3	Historical survey of jazz and related styles from the late 19th century to the present.	UG	LE	Lecture
Spring 2008	MUS118	118	Popular Musical Theatre	MUS	Music	3	Survey of popular musical theatre from its origin in classic comic opera to the present. Emphasis on the Broadway musical since the 1940s.	UG	LE	Lecture
Spring 2008	MUS121	121	Music Listening	MUS	Music	2	Listening skills and aural analysis through musical examples from a variety of periods and cultures. Principal styles, genres, and composers of Western music from the middle ages to the present.	UG	LE	Lecture
Spring 2008	MUS122	122	Music Listening	MUS	Music	2	Listening skills and aural analysis through musical examples from a variety of periods and cultures. Principal styles, genres, and composers of Western music from the middle ages to the present.	UG	LE	Lecture
Spring 2008	MUS125	125	Beginning Piano I	MUS	Music	1	For nonmusic majors, class instruction in basic keyboard skills, rudiments of music theory, and beginning sight reading.	UG	LE	Lecture
Spring 2008	MUS126	126	Beginning Piano II	MUS	Music	1	Continuation of MUS 125. Development of additional keyboard skills. Study of melody, harmony, and rhythm.	UG	LE	Lecture
Spring 2008	MUS127	127	Beginning Piano III	MUS	Music	1	Continuation of MUS 126. Performance of simple music and application of knowledge of musical elements through performance.	UG	LE	Lecture

Spring 2008	MUS131	131	Beg Guitar Class I	MUS	Music	1	Focuses on the development of good playing habits through melody and chord playing. Tuning, care of the guitar, and tablature reading covered, various guitar styles demonstrated. Students provide own instruments. Electric guitars not suitable.	UG	LE	Lecture
Spring 2008	MUS132	132	Beg Guitar Class II	MUS	Music	1	Based on technique covered in MUS 131, this class concentrates on note-reading, more chords, and accompaniment styles.	UG	LE	Lecture
Spring 2008	MUS133	133	Beg Guitar Class III	MUS	Music	1	Based on technique covered in MUS 132, this class concentrates on note-reading, more chords, and accompaniment styles, and some aspects of theory.	UG	LE	Lecture
Spring 2008	MUS145	145	Voice Class	MUS	Music	1		UG	LE	Lecture
Spring 2008	MUS146	146	Voice Class	MUS	Music	1		UG	LE	Lecture
Spring 2008	MUS151	151	Sight Singing and Dictation	MUS	Music	1	The study of sight singing and techniques for hearing and notating melody and harmony.	UG	LE	Lecture
Spring 2008	MUS152	152	Sight Singing and Dictation	MUS	Music	1	The study of sight singing and techniques for hearing and notating melody and harmony.	UG	LE	Lecture
Spring 2008	MUS153	153	Sight Singing and Dictation	MUS	Music	1	The study of sight singing and techniques for hearing and notating melody and harmony.	UG	LE	Lecture

Spring 2008	MUS155	155	Keyboard Musicianship	MUS	Music	1	Class instruction in functional keyboard skills including technique, chord construction and connection, improvisation, harmonization, playing by ear, sight reading, score reading, ensemble playing, and performing repertoire pieces.	UG	LE	Lecture
Spring 2008	MUS156	156	Keyboard Musicianship	MUS	Music	1	Class instruction in functional keyboard skills including technique, chord construction and connection, improvisation, harmonization, playing by ear, sight reading, score reading, ensemble playing, and performing repertoire pieces.	UG	LE	Lecture
Spring 2008	MUS157	157	Keyboard Musicianship	MUS	Music	1	Class instruction in functional keyboard skills including technique, chord construction and connection, improvisation, harmonization, playing by ear, sight reading, score reading, ensemble playing, and performing repertoire pieces.	UG	LE	Lecture
Spring 2008	MUS198	198	Intro To Music Tech	MUS	Music	2	Introductory elements of software notation, sound recording/editing and using technology as a practice tool.	UG	OT	Other
Spring 2008	MUS199	199	Intro to Music Educ	MUS	Music	2	Introduction to the social, historical and philosophical foundations of music education. Includes overview of the music teaching profession, including basic terminology, examination of necessary skills and dispositions, curricular issues, and instructional procedures.	UG	LE	Lecture

Spring 2008	MUS201	201	Music Theory	MUS	Music	3	Continuation of MUS 101, 102, 103. Part-writing, analysis, and harmony on a more advanced level.	UG	LE	Lecture
Spring 2008	MUS202	202	Music Theory	MUS	Music	3	Continuation of MUS 101, 102, 103. Part-writing, analysis, and harmony on a more advanced level.	UG	LE	Lecture
Spring 2008	MUS203	203	Music Theory	MUS	Music	3	Continuation of MUS 101, 102, 103. Part-writing, analysis, and harmony on a more advanced level.	UG	LE	Lecture
Spring 2008	MUS214	214	Music in Western Culture	MUS	Music	4	Introduction to the music of Western culture from the Middle Ages to the present. Emphasis on listening skills; elements of music; major styles, genres, and composers; and cultural context.	UG	LE	Lecture
Spring 2008	MUS215	215	String Methods I	MUS	Music	1	The study of materials, equipment, and class instruction in basic playing and teaching string instruments.	UG	LE	Lecture
Spring 2008	MUS216	216	String Methods II	MUS	Music	1	The study of materials, equipment, and class instruction in basic paying and teaching string instruments.	UG	LE	Lecture
Spring 2008	MUS223	223	Methods-Music Marching Bands	MUS	Music	3	Materials, techniques, and administration of marching bands in the public school.	UG	LE	Lecture
Spring 2008	MUS224	224	High Brass Methods	MUS	Music	1	Class instruction, materials, and pedagogy for trumpet and horn. Instrument music majors only.	UG	LE	Lecture

Spring 2008	MUS225	225	Low Brass Methods	MUS	Music	1	Class instruction. Materials and pedagogy for trombone and tuba. Instrumental music education majors only.	UG	LE	Lecture
Spring 2008	MUS226	226	Elementary Brass Methods	MUS	Music	1	General survey of brass instruments. Vocal and string majors only.	UG	LE	Lecture
Spring 2008	MUS227	227	Woodwind Methods I	MUS	Music	1	The study of materials, equipment, and class instruction in playing and teaching woodwind instruments in public school.	UG	LE	Lecture
Spring 2008	MUS228	228	Woodwind Methods II	MUS	Music	1	The study of materials, equipment, and class instruction in playing and teaching woodwind instruments in the public school.	UG	LE	Lecture
Spring 2008	MUS229	229	Elementary Woodwinds	MUS	Music	1	General survey of woodwind instruments for vocal and string methods. String or vocal majors only.	UG	LE	Lecture
Spring 2008	MUS231	231	Percussion Instruments	MUS	Music	1	Class instruction. Materials and pedagogy.	UG	LE	Lecture
Spring 2008	MUS251	251	Sight Singing & Diction	MUS	Music	1	Continuation of MUS 153.	UG	LE	Lecture
Spring 2008	MUS252	252	Sight Singing and Diction	MUS	Music	1	Continuation of MUS 251.	UG	LE	Lecture
Spring 2008	MUS253	253	Sight Singing and Diction	MUS	Music	1	Continuation of MUS 252.	UG	LE	Lecture
Spring 2008	MUS255	255	Keyboard Musicianship	MUS	Music	1	Class instruction in functional keyboard skills. Continuation of MUS 157.	UG	LE	Lecture
Spring 2008	MUS256	256	Keyboard Musicianship	MUS	Music	1	Class instruction in functional keyboard skills. Continuation of MUS 157.	UG	LE	Lecture

Spring 2008	MUS257	257	Keyboard Musicianship	MUS	Music	1	Class instruction in functional keyboard skills. Continuation of MUS 157.	UG	LE	Lecture
Spring 2008	MUS261	261	Pronunciation-Foreign Language	MUS	Music	2	For students of singing. Application of the International Phonetic Alphabet to German and French. Includes intensive readings of song lyrics.	UG	LE	Lecture
Spring 2008	MUS262	262	Pronunciation-Foreign Language	MUS	Music	2	For students of singing. Application of the International Phonetic Alphabet to German and French. Includes intensive readings of song lyrics.	UG	LE	Lecture
Spring 2008	MUS281	281	Jazz Improvisation I	MUS	Music	1	Basic fundamental scales and principles associated with the jazz tradition. Includes the study and performance of the blues, minor pentatonic, minor seventh, and major scales.	UG	LE	Lecture
Spring 2008	MUS282	282	Jazz Improvisation II	MUS	Music	1	Study and performance of the cycle of fifths through technical jazz exercises designed to complement the highly syncopated rhythms and nondiatonic melodies found in the music of the Bebop era.	UG	LE	Lecture
Spring 2008	MUS283	283	Lazz Improvisation III	MUS	Music	1	Introduces popular jazz riffs that have become standard practice among jazz artists of all periods and focuses on grace notes, diminished scales, diminished whole-tone scales, and transcribed jazz solos.	UG	LE	Lecture

Spring 2008	MUS284	284	Advanced Jazz Improv	MUS	Music	1	Introduces both the technical and psychological artistic approach to sound production relating to jazz music and examines important recordings from various periods of jazz history.	UG	LE	Lecture
Spring 2008	MUS290	290	African Amer Music:Amer/Beyond	MUS	Music	4	Survey of the development of African American music from a historical, sociological, and cultural perspective. Included will be an analysis of the genres, influences, and impact on American and world culture.	UG	LE	Lecture
Spring 2008	MUS290W	290W	Writing in MUS 290	MUS	Music	0	Required writing component for MUS 290.	UG	LB	Lab
Spring 2008	MUS311	311	History of Music	MUS	Music	3	From ancient and medieval periods through the 20th century.	UG	LE	Lecture
Spring 2008	MUS311W	311W	Writing in MUS 311	MUS	Music	0	Required writing component for MUS 311.	UG	LB	Lab
Spring 2008	MUS312	312	History of Music	MUS	Music	3	From ancient and medieval periods through the 20th century.	UG	LE	Lecture
Spring 2008	MUS312W	312W	Writing in MUS 312	MUS	Music	0		UG	LB	Lab
Spring 2008	MUS313	313	History of Music	MUS	Music	3	From ancient and medieval periods through the 20th century.	UG	LE	Lecture
Spring 2008	MUS313W	313W	Writing in MUS 313	MUS	Music	0		UG	LB	Lab

Spring 2008	MUS316	316	Piano Pedagogy I	MUS	Music	3	History of piano pedagogy. Overview of the teaching and learning process. Study of methods and materials for use with students of various age groups during their first years of piano studies.	UG	LE	Lecture
Spring 2008	MUS317	317	Piano Pedagogy II	MUS	Music	3	Investigation of individual and group procedures for teaching, rhythm, music reading, pianistic technique, elementary improvisation, and artistic expression. Discussion of repertoire and anthologies.	UG	LE	Lecture
Spring 2008	MUS323	323	Instr Music Ed Methods I	MUS	Music	2	Foundations of instrumental music education.	UG	LE	Lecture
Spring 2008	MUS324	324	Instr Music Ed Methods II	MUS	Music	2	This course will build on issues raised in MUS 323 and cover techniques, materials, and methods for the school instrumental music program.	UG	LE	Lecture
Spring 2008	MUS325	325	Instr Music Ed Methods III	MUS	Music	2	This course will equip prospective teachers and future instrumental conductors with practical and artistical applications, pedagogical techniques, materials, methods, and literature for school instrumental music programs.	UG	LE	Lecture
Spring 2008	MUS327	327	Choral Methods I	MUS	Music	2	Materials and methods for choral music education students with primary focus on elementary and middle school settings.	UG	LE	Lecture

Spring 2008	MUS328	328	Music in the Elementary School	MUS	Music	3	Materials, techniques, organization, and administration of vocal and general music programs in the public school. Reading components and teaching strategies included.	UG	LE	Lecture
Spring 2008	MUS329	329	Choral Methods II	MUS	Music	2	Materials and methods for choral general music students with primary focus on junior high and high school settings.	UG	LE	Lecture
Spring 2008	MUS330	330	Choral Methods III	MUS	Music	2	Materials and methods for choral general music students with primary focus on high school settings.	UG	LE	Lecture
Spring 2008	MUS335	335	Basic Conducting	MUS	Music	2	Basic baton technique and score reading for choral and instrumental conducting.	UG	LE	Lecture
Spring 2008	MUS336	336	Instrumental Conducting I	MUS	Music	2	This course is designed to enable the student to develop basic knowledge and skills relating to conducting instrumental ensembles in a variety of settings. Combination of lecture, seminar, and lab.	UG	LE	Lecture
Spring 2008	MUS337	337	Instrumental Conducting II	MUS	Music	2	This course is designed to enable the student to develop intermediate level knowledge and skills relating to conducting instrumental ensembles in a variety of settings. Combination of lecture, seminar and lab.	UG	LL	Lecture/Lab Combination
Spring 2008	MUS337L	337L	Advanced Choral Conducting Lab	MUS	Music	0		UG	LB	Lab

Spring 2008	MUS338	338	Instrumental Conducting III	MUS	Music	2	Continuation of Music 335. Emphasis on rehearsal techniques, comprehensive musicianship, and performance practices. For music majors. Instrumental laboratory ensemble required.	UG	LE	Lecture
Spring 2008	MUS338L	338L	Adv Instrument Conducting Lab	MUS	Music	0		UG	LB	Lab
Spring 2008	MUS339	339	Choral Conducting I	MUS	Music	2	This course is designed to enable the student to develop basic knowledge and skills relating to conducting choral ensembles in a variety of levels and settings. Combination of lecture, seminar, and lab.	UG	LE	Lecture
Spring 2008	MUS340	340	Choral Conducting II	MUS	Music	2	This course is designed to enable the student to develop basic knowledge and skills relating to conducting choral ensembles in a variety of levels and settings. Combination of lecture, seminar, and lab.	UG	LE	Lecture
Spring 2008	MUS341	341	Choral Conducting III	MUS	Music	2	This course is designed to enable the student to develop basic knowledge and skills relating to conducting choral ensembles in a variety of levels and settings. Combination of lecture, seminar, and lab.	UG	LE	Lecture
Spring 2008	MUS342	342	Form & Analysis	MUS	Music	3	Harmonic and formal analysis: motive, phrase, periods, and binary and ternary forms.	UG	LE	Lecture

Spring 2008	MUS343	343	Orchestration	MUS	Music	2	Tone quality and ranges of orchestral instruments; voice qualities and ranges of choral ensembles; and written assignments in each area.	UG	LE	Lecture
Spring 2008	MUS355	355	Keyboard Musicianship	MUS	Music	1	This course provides vocal music education majors with functional and technical keyboard skills needed for successful choral music classroom instruction.	UG	LE	Lecture
Spring 2008	MUS356	356	Keyboard Musicianship	MUS	Music	1	This course provides vocal music education majors with functional and technical keyboard skills needed for successful choral music classroom instruction.	UG	LE	Lecture
Spring 2008	MUS357	357	Keyboard Musicianship	MUS	Music	1	This course provides vocal music education majors with functional and technical keyboard skills needed for successful choral music classroom instruction.	UG	LE	Lecture
Spring 2008	MUS365	365	Mthds/Mtrls-Tchng Gen Mus K-6	MUS	Music	4	Materials and methods for teaching general music in grades K-6. Laboratory session required in addition to regular class meeting times for the purpose of developing skills in sight singing and in the use of traditional classroom instruments.	UG	LL	Lecture/Lab Combination
Spring 2008	MUS371	371	Composition	MUS	Music	3	Creative writing in smaller forms for a variety of media. Includes the exploration of various composition styles.	UG	LE	Lecture
Spring 2008	MUS372	372	Composition	MUS	Music	3	Creative writing in smaller forms for a variety of media.	UG	LE	Lecture

Spring 2008	MUS373	373	Composition	MUS	Music	3	Creative writing in smaller forms for a variety of media. Includes the exploration of various composition styles.	UG	LE	Lecture
Spring 2008	MUS381	381	Electronic Music Composition	MUS	Music	3	Composition using electronically generated and manipulated sounds. Includes a historical survey of styles and an exploration of tape and synthesizer techniques.	UG	LE	Lecture
Spring 2008	MUS381L	381L	Electronic Mus Composition Lab	MUS	Music	0		UG	LB	Lab
Spring 2008	MUS382	382	Electronic Music Composition	MUS	Music	3	Composition using electronically generated and manipulated sounds. Includes a historical survey of styles and an exploration of tape and synthesizer techniques.	UG	LE	Lecture
Spring 2008	MUS382L	382L	Electronic Mus Composition Lab	MUS	Music	0		UG	LB	Lab
Spring 2008	MUS383	383	Electronic Music Composition	MUS	Music	3	Composition using electronically generated and manipulated sounds. Includes a historical survey of styles and an exploration of tape and synthesizer techniques.	UG	LE	Lecture
Spring 2008	MUS383L	383L	Electronic Mus Composition Lab	MUS	Music	0		UG	LB	Lab
Spring 2008	MUS399	399	Studies in Selected Subjects	MUS	Music	1		UG	LE	Lecture

Spring 2008	MUS401	401	Teach Mus In Plur Soc	MUS	Music	3	Orientation to teaching in a pluralistic society and awareness of the total global community. Examination of social and philosophical foundations as they relate to teaching music in diverse settings and situations.	UG	LE	Lecture
Spring 2008	MUS414	414	Intro to Research in Music	MUS	Music	3	Methods of scholarly investigation in music history, theory, and education; music bibliography; emphasis on individual projects and reports.	UG	LE	Lecture
Spring 2008	MUS420	420	Opera Production and Coaching	MUS	Music	2	For advanced singers in the production of opera; culminates in public performance. Individual coaching for major role assignment. Study and involvement in technical areas of production: set design, building, properties, and costumes. May include participation in Dayton Opera productions.	UG	LL	Lecture/Lab Combination
Spring 2008	MUS424	424	History of Music Theory	MUS	Music	3	Survey of music theory from Jean Philippe Rameau to the present. Traces lines of thought that have had significant influence on musical study in the 20th century.	UG	LE	Lecture

Spring 2008	MUS425	425	Senior Theory Seminar	MUS	Music	3	In depth study of selected topics in Music Theory. Students will be involved in individual faculty-directed projects which culminate in a class presentation and a research paper.	UG	LE	Lecture
Spring 2008	MUS430	430	Improving Rdg-Mus Cntnt Area	MUS	Music	4.5	This course provides multi-age music teachers with reading and writing strategies to help solve problems encountered in grades K-12. Language art skills and strategies are taught to help students communicate more effectively across the curriculum.	UG	LE	Lecture
Spring 2008	MUS431	431	Canon and Fugue	MUS	Music	3		UG	LE	Lecture
Spring 2008	MUS432	432	Canon and Fugue	MUS	Music	3		UG	LE	Lecture
Spring 2008	MUS433	433	Canon and Fugue	MUS	Music	3	Selection of and research in some of the problems in vocal and instrumental teaching and supervision.	UG	LE	Lecture
Spring 2008	MUS435	435	Studies in Music Literature	MUS	Music	3	Courses in various aspects of the literature of music, such as Symphonic Literature or Chamber Literature, or focusing on a composer or nationality. Topics vary.	UG	LE	Lecture
Spring 2008	MUS436	436	Counterpoint	MUS	Music	3	Introduction to contrapuntal techniques. Exercises in species counterpoint, imitation and fugal devices. Analysis of examples from the Renaissance to the 20th century.	UG	LE	Lecture

Spring 2008	MUS441	441	Pedagogy	MUS	Music	1	Fundamental problems involved in studio teaching. Critical analysis of teaching materials. Observation and practice in private teaching required.	UG	LE	Lecture
Spring 2008	MUS442	442	Pedagogy	MUS	Music	1	Fundamental problems involved in studio teaching. Critical analysis of teaching materials. Observation and practice in private teaching required.	UG	LE	Lecture
Spring 2008	MUS443	443	Vocal Pedagogy I	MUS	Music	2	This course is designed to make students familiar with physiological and psychological aspects of voice so they will better understand their own instruments and will be better equipped to teach others.	UG	LE	Lecture
Spring 2008	MUS444	444	Vocal Pedagogy II	MUS	Music	2	A continuation of the physiological and psychological aspects of vocal student presented in MUS 443.	UG	LE	Lecture
Spring 2008	MUS446	446	Medieval & Renaissance Music	MUS	Music	3	Includes critical analysis of representative works from major composers.	UG	LE	Lecture
Spring 2008	MUS447	447	Baroque Music	MUS	Music	3	Includes critical analysis of representative works from major composers.	UG	LE	Lecture
Spring 2008	MUS448	448	Classic and Romantic Music	MUS	Music	3	Includes critical analysis of representative works from major composers.	UG	LE	Lecture
Spring 2008	MUS449	449	Music Since 1900	MUS	Music	3		UG	LE	Lecture

Spring 2008	MUS451	451	Piano Literature	MUS	Music	3	Historical survey of music for piano from origins in clavichord and harpsichord in the Renaissance through the 20th century.	UG	LE	Lecture
Spring 2008	MUS452	452	Piano Literature	MUS	Music	3	Historical survey of music for piano from origins in clavichord and harpsichord in the Renaissance through the 20th century.	UG	LE	Lecture
Spring 2008	MUS453	453	Piano Literature	MUS	Music	3	Historical survey of music for piano from origins in clavichord and harpsichord in the Renaissance through the 20th century.	UG	LE	Lecture
Spring 2008	MUS455	455	Vocal Literature	MUS	Music	3	Survey of vocal literature from the 18th through the 20th century emphasizing German lieder, French melodie, English and American art songs, opera, and oratorio. For music majors only.	UG	LE	Lecture
Spring 2008	MUS456	456	Vocal Literature	MUS	Music	3	Survey of vocal literature from the 18th through the 20th century emphasizing German lieder, French melodie, English and American art songs, opera, and oratorio. For music majors only.	UG	LE	Lecture
Spring 2008	MUS457	457	Vocal Literature	MUS	Music	3	Survey of vocal literature from the 18th through the 20th century emphasizing German lieder, French melodie, English and American art songs, opera, and oratorio. For music majors only.	UG	LE	Lecture

Spring 2008	MUS461	461	American Music	MUS	Music	3	Music in the United States from 1620 to the present, with emphasis on national idioms and native composition.	UG	LE	Lecture
Spring 2008	MUS465	465	Computer Applications in Music	MUS	Music	3	Study of computer technology and music software applications. Emphasis is placed upon using MIDI for electronic score notation, sequencing, and basic courseware design.	UG	LE	Lecture
Spring 2008	MUS471	471	Advanced Composition	MUS	Music	3	Creative writing that encompasses a variety of media and forms. Includes style exploration and the development of a personal style.	UG	LE	Lecture
Spring 2008	MUS472	472	Advanced Composition	MUS	Music	3	Creative writing that encompasses a variety of media and forms. Includes style exploration and the development of a personal style.	UG	LE	Lecture
Spring 2008	MUS473	473	Advanced Composition	MUS	Music	3	Creative writing that encompasses a variety of media and forms. Includes style exploration and the development of a personal style.	UG	LE	Lecture
Spring 2008	MUS480	480	Workshops in Music	MUS	Music	1	Study of selected special topics or problems in music, or special areas of music teaching. Titles vary.	UG	LE	Lecture
Spring 2008	MUS481	481	Adv Studies in Spec Subjects	MUS	Music	1	Directed research. May be taken for a letter grade or pass/unsatisfactory.	UG	LE	Lecture

Spring 2008	MUS601	601	Intro-Graduate Studies-Music	MUS	Music	4	Methods of investigation in music; use of music bibliography; problems of collecting and evaluating information; and reporting of findings.	GR	LE	Lecture
Spring 2008	MUS602	602	Intro Res In Music Ed	MUS	Music	4	Class studies and individual projects. Reading, research, discussion and reports; interpretation of contemporary research	GR	LE	Lecture
Spring 2008	MUS635	635	Intro-Mus Ed for Spec Learner	MUS	Music	4	Materials, techniques, curriculum for teaching music to the special learner in public/private school music programs.	GR	LE	Lecture
Spring 2008	MUS636	636	Counterpoint	MUS	Music	3	Analytical study of representative compositions of the twentieth century. Study of contrapuntal techniques with practical application in writing and analysis.	GR	LE	Lecture
Spring 2008	MUS643	643	Vocal Pedagogy I	MUS	Music	2	The purpose of this course is to make the students familiar with the physiological and psychological aspects of the voice so they will better understand their own instrument and be better equipped to teach each others.	GR	LE	Lecture
Spring 2008	MUS644	644	Vocal Pedagogy II	MUS	Music	2	A continuation of MUS 643. during this second quarter of instruction, each student will be required to teach at least one private student.	GR	LE	Lecture

Spring 2008	MUS646	646	Medieval and Renaissance Music	MUS	Music	3	Includes critical analysis of representative works from major composers.	GR	LE	Lecture
Spring 2008	MUS647	647	Baroque Music	MUS	Music	3	Includes critical analysis of representative works from major composers.	GR	LE	Lecture
Spring 2008	MUS648	648	Classic & Romantic Music	MUS	Music	3	Includes critical analysis of representative works from major composers.	GR	LE	Lecture
Spring 2008	MUS649	649	Music Since 1900	MUS	Music	3	Includes critical analysis of representative works from major composers.	GR	LE	Lecture
Spring 2008	MUS650	650	Opera Production and Coaching	MUS	Music	2	Production of opera; public performance and individual coaching. For advanced singers. At the discretion of the instructor course requirements may include participation in Dayton Opera productions.	GR	LE	Lecture
Spring 2008	MUS651	651	Piano Literature	MUS	Music	3	Historical survey of music for piano from origins in clavichord and harpsichord in the Renaissance through the twentieth century.	GR	LE	Lecture
Spring 2008	MUS652	652	Piano Literature	MUS	Music	3	Historical survey of music for piano from origins in clavichord and harpsichord in the Renaissance through the twentieth century.	GR	LE	Lecture
Spring 2008	MUS653	653	Piano Literature	MUS	Music	3	A study of selected intermediate-level piano music written by major composers and chosen to illustrate chronological sequence and characteristics of important nationalities.	GR	LE	Lecture

Spring 2008	MUS655	655	Vocal Literature I	MUS	Music	3	Survey of vocal literature from the 18th through the 20th century emphasizing German Lieder, French melodie, English and American art song, opera, and oratorio.	GR	LE	Lecture
Spring 2008	MUS656	656	Vocal Literature II	MUS	Music	3	Survey of vocal literature from the 18th through the 20th century emphasizing German Lieder, French melodie, English and American art song, opera, and oratorio.	GR	LE	Lecture
Spring 2008	MUS657	657	Vocal Literature III	MUS	Music	3	Survey of vocal literature from the 18th through the 20th century emphasizing German Lieder, French melodie, English and American art song, opera, and oratorio.	GR	LE	Lecture
Spring 2008	MUS665	665	Computer Applications in Music	MUS	Music	3		GR	LE	Lecture
Spring 2008	MUS680	680	Workshops in Music	MUS	Music	1	Selected topics or problems in music, or special areas of music teaching. Titles vary.	GR	LE	Lecture
Spring 2008	MUS681	681	Adv Studies in Special Subject	MUS	Music	1	May be taken for letter grade or pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	MUS682	682	Adv Studies in Special Subject	MUS	Music	1		GR	IS	Independent Study
Spring 2008	MUS683	683	Adv Studies in Special Subject	MUS	Music	1		GR	IS	Independent Study

Spring 2008	MUS704	704	Foundations & Prin of Music Ed	MUS	Music	4	Historical, philosophical, and psychological foundations of music education. Principles applied to theoretical and practical problems of music education.	GR	LE	Lecture
Spring 2008	MUS706	706	Supervision & Admin-Schl Mus	MUS	Music	3	Function of the supervisor of music in the public school. Curricula, testing programs, in-service training, teaching aids, school-community relationships, and budget.	GR	LE	Lecture
Spring 2008	MUS707	707	Contemporary Trends-Music Ed	MUS	Music	3	Problems, objectives, and current practices in music education. Contemporary theories of learning applied to music education. The arts in public education.	GR	LE	Lecture
Spring 2008	MUS711	711	Advanced Choral Conducting	MUS	Music	3	Technique and practice of choral conducting and score preparation. Choral music literature suitable for high school and college groups.	GR	LE	Lecture
Spring 2008	MUS712	712	Adv Instrumental Conducting	MUS	Music	3	Technique and practice of instrumental conducting and score preparation. Instrumental literature suitable for high school and college groups.	GR	LE	Lecture
Spring 2008	MUS713	713	Choral Literature & Techniques	MUS	Music	3	Critical study of large group and ensemble literature from 1500 to present. Rehearsal techniques and performance practices. Selection of literature and programming.	GR	LE	Lecture

Spring 2008	MUS714	714	Instrumental Literature & Tech	MUS	Music	3	Critical study of large group and ensemble literature. Rehearsal techniques and performance practices. Selection of literature and programming.	GR	LE	Lecture
Spring 2008	MUS716	716	Trend in Elementary Music	MUS	Music	3	Contemporary practices in elementary school music. Creative approaches and techniques; use of new materials.	GR	LE	Lecture
Spring 2008	MUS717	717	Gen Music-Mid & Jr High School	MUS	Music	3	Philosophies, objectives, techniques, and materials. The listening program, the changing voice, and creative activities in music for the adolescent and pre-adolescent years.	GR	LE	Lecture
Spring 2008	MUS718	718	Music and the Humanities	MUS	Music	3	Exploration of relationships between music and other arts. Consideration of works of art in terms of social, political, religious, economic, and philosophical implications; teaching the arts as a humanistic discipline.	GR	LE	Lecture
Spring 2008	MUS721	721	Mus Since 1990-Gen Mus Prgrm	MUS	Music	3	Critical study of music of the Twentieth Century, with techniques of teaching this music for Grades K-12.	GR	LE	Lecture
Spring 2008	MUS722	722	Marching Band Techniques	MUS	Music	3	Advanced study of various marching band styles and techniques. Adopting drum corps techniques. Selection of materials. Writing shows. Field planning and production.	GR	LE	Lecture

Spring 2008	MUS731	731	Theory of Music	MUS	Music	3	Written and analytical skills relating to music of period of common practice through the twentieth century with emphasis on four-part homophonic writing.	GR	LE	Lecture
Spring 2008	MUS732	732	Ear Training	MUS	Music	1	Sight singing and aural recognition of melodic, harmonic, and rhythmic components in music from the common practice to the present.	GR	LE	Lecture
Spring 2008	MUS733	733	Analytical Techniques I	MUS	Music	3	Analytical study of representative compositions of the Middle Ages, Renaissance, and Baroque period.	GR	LE	Lecture
Spring 2008	MUS734	734	Analytical Techniques II	MUS	Music	3	Analytical study of representative compositions of the Classical and Romantic periods.	GR	LE	Lecture
Spring 2008	MUS735	735	Analytical Techniques III	MUS	Music	3	Analytical study of representative compositions in music composed since 1900.	GR	LE	Lecture
Spring 2008	MUS741	741	Band and Orchestral Arranging	MUS	Music	3	Band and orchestral instrumentation; scoring of transcriptions and original compositions.	GR	LE	Lecture
Spring 2008	MUS742	742	Choral Arranging	MUS	Music	3	Arranging for choral ensembles common to schools, grades 6-12.	GR	LE	Lecture
Spring 2008	MUS780	780	Pedagogy	MUS	Music	1	Advanced course in techniques, practices, and materials for group and individual instruction. Musical styles and interpretation. Performance in instruments or voice. Titles vary.	GR	LE	Lecture

Spring 2008	MUS789	789	Continuing Registration	MUS	Music	1		GR	IS	Independent Study
Spring 2008	MUS799	799	Thesis	MUS	Music	1		GR	IS	Independent Study
Spring 2008	NCP333	333	Neuroscience Today	NCP	Neuroscience, Cell Bio & Phys	3	This course introduces students to contemporary Neuroscience. Interdisciplinary facts and concepts are integrated to address brain function and dysfunction underlying motor, sensory and other brain-derived processes. The scope spans celluar to behavioral dimensions.	UG	LE	Lecture
Spring 2008	NRL800	800	Student-Initiated Elective	NRL	Neurology	4		MD	CL	Clinical
Spring 2008	NRL803	803	Sleep Disorders	NRL	Neurology	4		MD	CL	Clinical
Spring 2008	NRL891	891	Neuroscience Clerkship	NRL	Neurology	16		MD	CL	Clinical
Spring 2008	NRL900	900	Extramural	NRL	Neurology	4		MD	H	Hospital
Spring 2008	NUR114	114	Nursing elective	NUR	Nursing	2	Special topics.	UG	IS	Independent Study
Spring 2008	NUR209	209	Intro to Professional Nursing	NUR	Nursing	4	Explores history of nursing, its response to society, and evolution of contemporary nursing. Emphasizes past, present, and future roles based on selected concepts, models, and theories within the health care system.	UG	LE	Lecture

Spring 2008	NUR210	210	Intro to Nursing Informatics	NUR	Nursing	2	Introduction to trends and issues of informatics in nursing and health care with an emphasis on effective use of hardware and software in information technology. Laboratory experience included.	UG	LL	Lecture/Lab Combination
Spring 2008	NUR212	212	Nursing-Health & Wellness Life	NUR	Nursing	4	Emphasizes concepts, models, theories, and methodologies consistent with a philosophy of health and wellness. Incorporates self-directed activities to promote maximum health in self and others.	UG	LE	Lecture
Spring 2008	NUR212W	212W	Writing in NUR 212	NUR	Nursing	0	Required writing component for NUR 212.	UG	LB	Lab
Spring 2008	NUR217	217	Hlth Assesmen Accross Lifespan	NUR	Nursing	6	Focuses on skills and related concepts basic to clinical practice. Integrates health assessment skills into nursing care and development of nursing diagnosis. Communication for documentation of data base is stressed.	UG	LE	Lecture
Spring 2008	NUR217C	217C	Nursing Clinicals	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR217L	217L	Hlth Assesment Acrss Lfspn Lab	NUR	Nursing	0		UG	LB	Lab

Spring 2008	NUR218	218	Intro to Clinical Nursing	NUR	Nursing	6	Focuses on skills and related concepts basic to clinical practice. Integrates health assessment skills into nursing care and development of nursing diagnosis. Communication for documentation of data base is stressed.	UG	LE	Lecture
Spring 2008	NUR218C	218C	Intro to Clinical NSG Clin.	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR218L	218L	Intro to Clinical Nursing Lab	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR218W	218W	Writing in NUR 218	NUR	Nursing	0	Required writing component for NUR 218.	UG	LB	Lab
Spring 2008	NUR304	304	Found in Nursing Research	NUR	Nursing	1	Introduces the basic elements of the research process. Emphasizes the critique and application of research findings to professional nursing practice. Prerequisite: NUR 218, STT 160 or equivalent.	UG	LE	Lecture
Spring 2008	NUR305	305	Lgl & Ethical Fndtns-Nrsg Prac	NUR	Nursing	3	Examines the theoretical basis of ethical decision making and legal elements of professional nursing practice. Prepares the student for clinical application experience in succeeding courses.	UG	LE	Lecture

Spring 2008	NUR306	306	Concepts-Altered Health Status	NUR	Nursing	3	Focuses on the relationship of normal body functioning and the physiological changes that occur as a result of illness including the body's compensatory mechanisms. Emphasis is placed on alterations in body function and system/organ failure.	UG	LE	Lecture
Spring 2008	NUR307	307	Fndtns of Fam & Group Nrsg	NUR	Nursing	4	Foundational course in family development from the perspective of family nursing science. Explores impact of environmental influences on family health. Theoretical frameworks guiding the culturally sensitive study and practice of group work will be examined.	UG	LE	Lecture
Spring 2008	NUR308	308	Theories & Concepts-Prof Nrsg	NUR	Nursing	5	Introductory course oriented toward the continued socialization of the professional nurse with synthesis of concepts, theories, processes, and models to facilitate transition into professional nursing. For registered nurses only.	UG	LE	Lecture
Spring 2008	NUR317	317	Selected Topics	NUR	Nursing	3	Topics vary.	UG	LE	Lecture
Spring 2008	NUR321	321	Adult Health & Illness	NUR	Nursing	7	A clinical course which focuses on adults across the lifespan with altered health states. Emphasis is on providing secondary preventive care in a variety of settings.	UG	LE	Lecture
Spring 2008	NUR321C	321C	Nursing Clinicals	NUR	Nursing	0		UG	LB	Lab

Spring 2008	NUR322	322	Nrsg Care of Childbearing Fam	NUR	Nursing	7	A clinical course focusing on the understanding and application of selected concepts related to the childbearing family in the maternity cycle.	UG	LE	Lecture
Spring 2008	NUR322C	322C	Nursing Clinicals	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR322W	322W	Writing in NUR 322	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR323	323	Nrsg Care of Childrearing Fam	NUR	Nursing	7	A clinical course focusing on children and adolescents in families with a variety of health states in various health care settings.	UG	LE	Lecture
Spring 2008	NUR323C	323C	Nursing Clinicals	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR323W	323W	Writing in NUR 323	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR324	324	Nrsg care of Aging/Aged Fam	NUR	Nursing	7	Examines theories, trends, and research in gerontological nursing. Examines the aging self, holistic health and independent function, hospitalization, and nursing management of illness in the aged. Explores advocacy for vulnerable aged.	UG	LE	Lecture
Spring 2008	NUR324C	324C	Nursing Clinicals	NUR	Nursing	0		UG	LB	Lab

Spring 2008	NUR405	405	Nrsg Care of Aging/Aged Fams	NUR	Nursing	3	Examines theories, trends, and research in gerontological nursing. Examines the healthy aged, holistic health and independent function, hospitalization and nursing management of illness in the aged. Explores advocacy for vulnerable aged.	UG	LE	Lecture
Spring 2008	NUR405W	405W	Writing in NUR 405	NUR	Nursing	0	Required writing component for NUR 405.	UG	LB	Lab
Spring 2008	NUR406	406	Ctnmpry Nrsg Iss & Hlth Plcy	NUR	Nursing	2	Examines global aspects of the social, political, legal, ethical, and environmental issues influencing health care, health policy, and advancement of the nursing profession. Professional issues confronting contemporary nursing are emphasized.	UG	LE	Lecture
Spring 2008	NUR407	407	Nrsg Ldrshp & Mgt Hlth Care	NUR	Nursing	2	Examination of theories and strategies of leadership and management in the realm of health care.	UG	LE	Lecture
Spring 2008	NUR414	414	Nursing Elective	NUR	Nursing	1	Topics vary.	UG	LE	Lecture
Spring 2008	NUR414W	414W	Writing in Nursing	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR415	415	Special Topics	NUR	Nursing	1	Faculty-directed, individualized study on student-selected topics. Permission of faculty required.	UG	IS	Independent Study

Spring 2008	NUR421	421	Nursing - Mental Health System	NUR	Nursing	7	Focuses on primary, secondary, and tertiary prevention of mental health problems with individuals, families, and groups. Foundations of psychosocial nursing practice are developed. Cultural, biosocial, and sociopolitical forces affecting mental health systems are analyzed.	UG	LE	Lecture
Spring 2008	NUR421C	421C	Nrsg in Mental Hlth Sys Clin.	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR422	422	Nursing in Community Hlth Sys	NUR	Nursing	7	Clinical course integrating nursing and public health concepts/trends to assess community health needs. Primary, secondary, and tertiary prevention for health of individuals, families, groups, and communities affected by social, political, and environmental forces are stressed.	UG	LE	Lecture
Spring 2008	NUR422C	422C	Nrsg in Com Health Sys Clin.	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR422W	422W	Writing in NUR 422	NUR	Nursing	0	Required writing component for NUR 422.	UG	LB	Lab

Spring 2008	NUR423	423	High Actvty Nrsg-Cplx Hlth Sys	NUR	Nursing	7	A clinical course focusing on individuals experiencing life-threatening physiological crises. Integrates physiological, family, and community knowledge with concepts of high acuity care in a variety of settings.	UG	LE	Lecture
Spring 2008	NUR423C	423C	Nursing Clinicals	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR424	424	Synthesis Practicum-Prof Nrsg	NUR	Nursing	10	Clinical course which assists students in integration of theory and practice with emphasis on complexity of design and management of nursing care for individuals, families, and groups. Provides concentrated clinical practice in selected clinical areas. 180 hours of clinical to be arranged.	UG	SE	Seminar
Spring 2008	NUR425	425	Synthesis Practicum-Prof Nrsg	NUR	Nursing	4.5	Integration of theories and concepts for transition into professional practice with the evolution of a personal philosophy of nursing.	UG	SE	Seminar
Spring 2008	NUR425W	425W	Writing in NUR 425	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR441	441	Clncl Nrsg I:Fndtns:Adults Age	NUR	Nursing	9		UG	LE	Lecture
Spring 2008	NUR442	442	Clncl Nrsg 2:Adlts II&Hi Actv	NUR	Nursing	12		UG	LE	Lecture
Spring 2008	NUR443	443	Clncl Nrsg 3:Chldbrng&Chldrng	NUR	Nursing	9		UG	LE	Lecture

Spring 2008	NUR443W	443W	Writing in NUR 443	NUR	Nursing	0	Required writing component for NUR 443.	UG	LB	Lab
Spring 2008	NUR444	444	Clncl Nrsg 4:Cmmnty & Mntl Hlt	NUR	Nursing	9		UG	LE	Lecture
Spring 2008	NUR445	445	Clncl Nrsg 5:Synthesis Prctcm	NUR	Nursing	10	Clinical course assisting students to integrate theory and practice; emphasis on complexity of design and management of nursing care for individuals, families and groups. Concentrated clinical practice in selected clinical areas.	UG	LE	Lecture
Spring 2008	NUR446	446	Clin NSG Child Bearing	NUR	Nursing	6	Introduction to role and practice of nurses in providing care during childbearing. Professional standards of practice, nursing skills, diagnoses and interventions and evaluation related to professional standards of practice.	UG	LE	Lecture
Spring 2008	NUR447	447	Clin NSG Childrearing	NUR	Nursing	6	Introduction to role and practice of nurses in providing care during childrearing. Professional standards of practice, nursing skills, diagnoses and interventions and evaluation related to professional standards of practice.	UG	LE	Lecture
Spring 2008	NUR447W	447W	Writing in Nursing	NUR	Nursing	0		UG	LB	Lab

Spring 2008	NUR448	448	Clin NSG Mental Health	NUR	Nursing	6	Introduction to role and practice of providing nursing care related to mental health including skills, diagnoses, interventions and evaluation related to professional standards.	UG	LE	Lecture
Spring 2008	NUR449	449	Clin NSG Community Hlth	NUR	Nursing	6	Introduction to role and practice of providing nursing care related to community health including nursing skills, diagnoses, interventions and evaluation related to professional standards.	UG	LE	Lecture
Spring 2008	NUR449W	449W	Writing in Nursing	NUR	Nursing	0		UG	LB	Lab
Spring 2008	NUR450	450	Lgl,Ethcl & Prof Fndtns Nsg Pr	NUR	Nursing	3		UG	LE	Lecture
Spring 2008	NUR452	452	Beacon Seminar 2	NUR	Nursing	1	Seminar on role of nurses in meeting national health goals in caring for clients during childbearing and childrearing. Guidelines for practice and success strategies in caring for self and others.	UG	SE	Seminar
Spring 2008	NUR453	453	Beacon Seminar 3	NUR	Nursing	1	Seminar on role of nurses in meeting national goals in caring for clients in third quarter clinical settings. Guidelines for practice and success strategies in caring for self and others.	UG	SE	Seminar

Spring 2008	NUR454	454	Beacon Seminar 4	NUR	Nursing	1	Seminar on role of nurses in meeting national health goals in fourth quarter clinical settings. Guidelines for practice and success strategies in caring for self and others.	UG	SE	Seminar
Spring 2008	NUR455	455	Beacon Seminar 5	NUR	Nursing	1	Seminar on synthesis of theory and practice, emphasis on case studies applied to standards of nursing care and professional performance.	UG	SE	Seminar
Spring 2008	NUR462	462	Advanced Health Assessment	NUR	Nursing	2	Expands RN s knowledge of history taking and physical assessment as it relates to clients across the lifespan and in a variety of settings. RNs admitted to completion program only.	UG	LL	Lecture/Lab Combination
Spring 2008	NUR498	498	Nursing Honors Seminar	NUR	Nursing	2	Students discuss selected problems, issues, and special topics related to nursing that are not covered in depth during the usual curriculum. Students identify an area of interest and develop a project proposal for in-depth study.	UG	SE	Seminar
Spring 2008	NUR499	499	Nursing Honor Indpendent Study	NUR	Nursing	1	Provides an opportunity for development and completion of an honors project using theories and concepts from the humanities, sciences, and nursing. With guidance of a faculty member, students focus on an area of individual study.	UG	IS	Independent Study

Spring 2008	NUR614	614	Selected Topics	NUR	Nursing	1	Special topics. For nursing majors only.	GR	LE	Lecture
Spring 2008	NUR617	617	Selected Topics	NUR	Nursing	2	Special topics.	GR	LE	Lecture
Spring 2008	NUR640	640	School Nursing	NUR	Nursing	2	Roles and responsibilities of school nurses in Ohio. Overview of national trends in school nursing. Emphasis on preparing an individual to assume the role of school nurse.	GR	LE	Lecture
Spring 2008	NUR641	641	Children with Special Needs	NUR	Nursing	1	Roles and responsibilities of the nurse in caring for children with special needs in the school setting.	GR	LE	Lecture
Spring 2008	NUR642	642	Hlth Assmnt Child/Adols-School	NUR	Nursing	2	Health assessment course with emphasis on health history and physical assessment of children and adolescents in the school setting.	GR	LE	Lecture
Spring 2008	NUR643	643	School Nursing Practicum	NUR	Nursing	1	Application of roles and responsibilities of school nurses in Ohio.	GR	SE	Seminar
Spring 2008	NUR644	644	Health Promotion-School Nrsg	NUR	Nursing	1	Exploration of the art, principles, and strategies of promoting health in the school setting. Examination of existing community-based materials available for school nurse use.	GR	LE	Lecture
Spring 2008	NUR707	707	Research Design & Methods	NUR	Nursing	4	Critical analysis of components, methodology, and state-of-the-art research. Application of the research process in developing a research proposal.	GR	LE	Lecture

Spring 2008	NUR708	708	Theoretical Fndtns for Nursing	NUR	Nursing	4	Analysis of nursing and other selected concepts, models, and theories as related to nursing practice, administration, and education. Emphasis on development and application to nursing science.	GR	LE	Lecture
Spring 2008	NUR714	714	Selected Topics	NUR	Nursing	1	Advanced study of various topics. Titles vary.	GR	LE	Lecture
Spring 2008	NUR715	715	Independent Study	NUR	Nursing	1	Faculty-directed, individualized study in topics selected by the students.	GR	IS	Independent Study
Spring 2008	NUR716	716	Adv Practice of Family Nursing	NUR	Nursing	2	Family science and nursing theories are used as frameworks to assess and analyze family functioning including health promotion and risk identification of families experiencing health issues. Therapeutic interventions are discussed including multidisciplinary approaches.	GR	LE	Lecture
Spring 2008	NUR723	723	Practicum-Adult Hlth & Illness	NUR	Nursing	6	Observation, participation, and practice in area of clinical specialization. Seminars synthesize previous learning with application to the role of the advanced practice nurse. Clinical practicum required. Graduate standing in the College of Nursing and Health required.	GR	SE	Seminar
Spring 2008	NUR724	724	Adult Health & Illness I	NUR	Nursing	6	Use of primary care and advanced practice concepts in the care of adult clients experiencing changes in their bio-psycho-social-spiritual being.	GR	LE	Lecture

Spring 2008	NUR725	725	Adult Health & Illness II	NUR	Nursing	6	Examination and application of models for advanced practice roles. Use of primary care and advanced practice concepts in the care of adult clients.	GR	LE	Lecture
Spring 2008	NUR726	726	Hlt Care Environment Mgt	NUR	Nursing	5	Application of clinical nurse leader role in accountability for cost-effective and efficient use of human, environmental and material resources to promote client care, advance client education and enhance the accessibility of care.	GR	LE	Lecture
Spring 2008	NUR727	727	Clinical Outcomes Management	NUR	Nursing	5	Application of clinical nurse leader role in clinical outcomes management for health promotion, illness and health restoration in a micro-nursing system with lateral integration of care services to affect quality client outcomes throughout the lifespan.	GR	LE	Lecture
Spring 2008	NUR728	728	Clin Nur Ldr Immer Precp	NUR	Nursing	8.5	Intensive clinical focus provides students the opportunity to function as an advanced generalist providing managing care at the point of care based on the application of relevant theories, concepts, and research findings.	GR	LE	Lecture

Spring 2008	NUR730	730	Org Thry & Bhvr in Nrsg Adm	NUR	Nursing	3	Evaluation of the concepts, models, theories and principles of nursing administration. Provides an in-depth macro focus on organizational theories and behaviors applicable to the nurse administrator in a variety of settings.	GR	LE	Lecture
Spring 2008	NUR731	731	Strtgc Plng for Nrsg & Hlth	NUR	Nursing	6	A micro approach to nursing administration. Evaluation of management processes with an experiential component. Practical application of leadership/management concepts, models, and theories.	GR	LE	Lecture
Spring 2008	NUR732	732	Hum resources Mgt in Nrsg Adm	NUR	Nursing	3	Analysis of human resource management in health care organizations. Specific application is made to the nurse administrator role. Graduate standing in the College of Nursing and Health required.	GR	LE	Lecture
Spring 2008	NUR733	733	Practicum - Nrsg Administration	NUR	Nursing	5	Observation, participation, and practice in the administration of nursing services in health care settings. Seminars synthesize previous learning and application to nursing administration. Clinical practicum required	GR	SE	Seminar

Spring 2008	NUR734	734	Fincl Rsrce Mgt in Nrsg Admin	NUR	Nursing	3	Fiscal management concepts for nurse administrators. Content focuses on financial reporting function, resource allocation, managerial issues related to finance, financial planning, and control in nursing administration.	GR	LE	Lecture
Spring 2008	NUR735	735	Decision Mkng in Adm Nrsg/Hlth	NUR	Nursing	3	Analysis of quantitative and qualitative decision making models in health care systems. Cost-benefit, cost-utility, and cost-effectiveness analysis models are compared. CQI models evaluated for patient and staff outcomes. Introduction to database management.	GR	LE	Lecture
Spring 2008	NUR736	736	Info & Tech in Nrsg/Hlth Systm	NUR	Nursing	3	Systematic assessment of the clinical and administrative information needs of health care systems. Examines the technology and strategies needed to support nursing and health care in dynamic environmental systems.	GR	LE	Lecture
Spring 2008	NUR740	740	Nrsng Curriculum & Prog Dvlpmt	NUR	Nursing	1	Analysis of learning theories and models of nursing curriculum design. Development and evaluation of nursing curriculum and educational programs.	GR	LE	Lecture
Spring 2008	NUR741	741	Nursing Education Stratagies	NUR	Nursing	1	Examination and application of the art, principles, and strategies of teaching in nursing programs. Role of teacher in classroom is explored.	GR	LE	Lecture

Spring 2008	NUR742	742	Eval Strategies in Nursing Ed	NUR	Nursing	1	Examination and application of the art, principles, theories, models, and strategies of evaluation in nursing.	GR	LE	Lecture
Spring 2008	NUR743	743	Practicum in Nursing Education	NUR	Nursing	1	Observation, participation, and practice in teaching nursing concepts. Seminars synthesize previous learning with application to the role of the nurse educator. Clinical practicum required.	GR	SE	Seminar
Spring 2008	NUR744	744	Practicum School Nursing	NUR	Nursing	1	Focus on clinical application of theories, research for health promotion/maintenance, disease prevention for children/adolescents in schools. Emphasis on development of comprehensive school health program. Seminars synthesize learning with application to school nurse role.	GR	SE	Seminar
Spring 2008	NUR745	745	Advances in School Nsg	NUR	Nursing	2	Analysis of the role of the school nurse in promoting school and community health in a culturally diverse evolving environment using interdisciplinary practice, leadership and health promotion strategies.	GR	LE	Lecture

Spring 2008	NUR750	750	Hlth Policy,Politics, & Issues	NUR	Nursing	3	Critical analysis of public policies and issues affecting nursing and health care delivery. Encompasses economic, political, social, technological, ethical, and legal influences on consumers and health care providers from a global perspective.	GR	LE	Lecture
Spring 2008	NUR751	751	Health and Well-Being	NUR	Nursing	2	Identification of theoretical foundations of health promotion, disease prevention, and well-being for individuals and aggregates. Application and investigation of epidemiological concepts, cultural diversity, multidisciplinary collaboration, and national goals and trends affecting health care.	GR	LE	Lecture
Spring 2008	NUR755	755	Informatics-Hlth Care Seminar	NUR	Nursing	2	Introduction to trends and issues of informatics in health care with an emphasis on effective use of hardware and software in information technology.	GR	SE	Seminar
Spring 2008	NUR756	756	Advcd Nsg Roles/Ldrshp	NUR	Nursing	2	Understanding, synthesizing concepts and theories facilitating professional development and leadership in clinical practice, nursing administration or nursing education. Course includes practice models, role implementation, economic and financial issues, health care systems and trends.	GR	LE	Lecture

Spring 2008	NUR761	761	Adv Patho in Lifespn-APN	NUR	Nursing	3	Examines selected major physiological concepts associated with nursing diagnoses. Physiological concepts are integrated with diagnosis and treatment of human responses to health problems. Includes cardiovascular, pulmonary, renal, neurological, endocrine, reproductive, and gastrointestinal physiology.	GR	LE	Lecture
Spring 2008	NUR762	762	Advanced Health Assessment	NUR	Nursing	3	Application of cognitive processes and psychomotor skills needed for comprehensive health assessment. Emphasis on health history; physical, developmental, and nutritional assessment; and identification of common client problems across the life span.	GR	LL	Lecture/Lab Combination
Spring 2008	NUR763	763	Principles of Epidemiology	NUR	Nursing	2	Study of epidemiological concepts, principles, and methods with application to health and disease surveillance, investigation of disease outbreaks, and health planning. Critical analysis of published epidemiological research with regard to implications for clinical practice.	GR	LE	Lecture

Spring 2008	NUR764	764	Appl Pharm-Adv Practice Nurse	NUR	Nursing	0.5	Focuses on prescriptive knowledge of pharmacologic agents used in treatment of common primary health care problems and stable chronic disease states. Emphasis on indications, mechanisms of action, drug interactions, side effects, and client education.	GR	LE	Lecture
Spring 2008	NUR764S	764S	Appl Pharm-Adv Practice Nurse	NUR	Nursing	0.5	Focuses on prescriptive knowledge of pharmacologic agents used in treatment of common primary health care problems and stable chronic disease states. Emphasis on indications, mechanisms of action, drug interactions, side effects, and client education. Graded pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	NUR765	765	Pathophys-Chdrn/Adoles-Nurses	NUR	Nursing	3	Advanced study of physiologic systems and common pathologies for children/adolescents. Emphasis on knowledge for provision of nursing care for acute and chronic conditions, as well as disease prevention and health promotion.	GR	LE	Lecture
Spring 2008	NUR766	766	Adv Hlth Assess of Chdrn/Adole	NUR	Nursing	3	Application of processes and skills for comprehensive health assessment of children/adolescents. Emphasis on health history, physical assessment of children and adolescents incorporating various instruments to assess growth and development issues.	GR	LL	Lecture/Lab Combination

Spring 2008	NUR767	767	Adv Cncpts-Cardiovascular Nrsg	NUR	Nursing	3	Examination of physiological concepts, human responses, nursing assessments, and interventions related to actual and potential health problems in adults with cardiovascular alterations.	GR	LE	Lecture
Spring 2008	NUR768	768	12 Lead EKG Interpretation	NUR	Nursing	1	The focus in on the interpretation and clinical significance of abnormalities of the 12 lead electrocardiogram.	GR	LE	Lecture
Spring 2008	NUR769	769	Pediatric Pharmacology	NUR	Nursing	3	Focuses on the prescriptive knowledge of pharmacologic agents used in the treatment of common pediatric health care problems with emphasis on indicated, mechanisms of action, drug interactions, side effects and parent and child education.	GR	LE	Lecture
Spring 2008	NUR770	770	Community/Public Hlth Nrsg I	NUR	Nursing	2	Analysis of the role of the community health nurse specialist in community assessment and diagnosis, interdisciplinary practice, and health promotion and disease prevention primary care in a culturally and ethnically diverse evolving environment.	GR	LE	Lecture

Spring 2008	NUR771	771	Community/Public Hlth Nrsg II	NUR	Nursing	2	Analysis of role of community health nurse specialist in program planning in partnership with community. Continuous quality improvement including both evaluation and consultation to increase social justice and improve the environment of the aggregate.	GR	LE	Lecture
Spring 2008	NUR772	772	Practicum:Cmnty Nurse Spclst	NUR	Nursing	6	Observation, participation and practice as community health nurse specialist. Seminars synthesize previous learning with application to the role. Public health policies, legislation and economics of health care, including obtaining and financial management of grants.	GR	SE	Seminar
Spring 2008	NUR782	782	Adv Nursing of Child/Adoles I	NUR	Nursing	5	Application of advanced practice nursing skills integrating theory, research findings, and differential diagnosis in the provision of primary, acute, and chronic care. Clinical learning incorporates use of case management in the primary care setting.	GR	LE	Lecture

Spring 2008	NUR783	783	Adv Nursing of Child/Adoles II	NUR	Nursing	5	Introduces theoretical frameworks and research findings for advanced nursing practice required to provide case management and primary care for children/adolescents in families. Emphasis on nursing management of chronic/complex illnesses. Clinical practicum required.	GR	LE	Lecture
Spring 2008	NUR784	784	Adv Nursing of Child/Adols III	NUR	Nursing	5	Clinical application of relevant theories and research findings for health promotion and disease prevention, as well as health maintenance and restoration for children/adolescents using a family centered approach.	GR	LE	Lecture
Spring 2008	NUR785	785	Adv Nrsg of Chdrn/Adles Prctcm	NUR	Nursing	7	Intensive clinical focus for appliication of relevant theories, concepts, and research findings to clinical care. Stresses development of clinical competence required in delivering advanced practice nursing care to children/adolescents and families.	GR	LE	Lecture
Spring 2008	NUR786	786	Adv Acute Care Nsg C/A	NUR	Nursing	5	Emphasis on nursing management of complex acute illnesses and multi-system disorders of children/adolescents and their families. Clinical practicum focuses on multi-disciplinary collaboration for the delivery of comprehensive health care in high acuity setting.	GR	LE	Lecture

Spring 2008	NUR788	788	Nrsg Resrch Appl & Utilization	NUR	Nursing	3	Evaluation, utilization, and application of the research process.	GR	LE	Lecture
Spring 2008	NUR789	789	Continuing Registration	NUR	Nursing	1	A student must be registered at the graduate level in the quarter in which the degree is granted, or in any quarter in which the department is affording some service, such as giving an examination, reading a thesis, or giving advice on the thesis after completion of all other requirements of course work and research.	GR	IS	Independent Study
Spring 2008	NUR791	791	Primary Health Care of Women	NUR	Nursing	1	Provides knowledge and skills needed to deliver primary health care to women in multiple settings. Emphasizes application of problem identification and management, health promotion, and client and family counseling. Clinical and supervised lab experiences.	GR	LE	Lecture
Spring 2008	NUR792	792	Prmry Hlth Care-Yng/Oldr Adlts	NUR	Nursing	1	Provides knowledge and skills to deliver primary health care to adults across their lifespan in multiple settings. Emphasizes application of problem identification and management, health promotion, and client and family counseling. Supervised lab and clinical experiences.	GR	LE	Lecture

Spring 2008	NUR793	793	Prmry Hlth Care of Cldrn/Adols	NUR	Nursing	1	Provides knowledge and skills to deliver primary health care to children and adolescents in multiple settings, and patient and family counseling. Supervised lab and clinical experiences. Titles vary. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	NUR794	794	Fam Nrse Prcttnr Preceptorship	NUR	Nursing	1	Intensive clinical focus provides students the opportunity to apply relevant theories, concepts, and research findings to clinical care. Stresses development of clinical competence required in delivering primary health care.	GR	SE	Seminar
Spring 2008	NUR795	795	Mgt of Acute&Emrg Hlth Prob I	NUR	Nursing	4	Focus on complex symptom management in acute and emergent physiological alterations in systems. Health promotion, maintenance, and restoration emphasized. Advanced practice role development incorporated into the course through patient care management seminars, and practice.	GR	LE	Lecture

Spring 2008	NUR796	796	Mgt of Acute&Emrg Hlth Prob II	NUR	Nursing	4	Focus on complex symptom management in acute and emergent physiological alterations in systems. Health promotion, maintenance, and restoration emphasized. Advanced practice role development incorporated into the course through patient care management, seminars, and practice.	GR	LE	Lecture
Spring 2008	NUR797	797	Acte Cre Nrs Practitioner Prct	NUR	Nursing	7	Focus on synthesis of theory and implementation of ACNP role. Experiences emphasize clinical decision-making in an interprofessional environment with focus on ACNP as principal provider of care for patients with acute, emergent health problems.	GR	SE	Seminar
Spring 2008	NUR798	798	Supervised Exp in Nur Research	NUR	Nursing	1	Guided exploration of research problem(s) under direct supervision of experienced researcher.	GR	IS	Independent Study
Spring 2008	NUR799	799	Thesis/Scholarly Prjct Advsmnt	NUR	Nursing	1	Thesis or scholarly project.	GR	IS	Independent Study
Spring 2008	NUR820	820	Scientific Basis of nsg	NUR	Nursing	4.5	This course examines nursing science from a broad range of perspectives. The emphasis is on identification and analysis of nursing phenomena, use of nursing science to manage phenomena, and evaluation of outcomes.	GR	LE	Lecture

Spring 2008	NUR825	825	Applied NSG Research	NUR	Nursing	4.5	This course is an extension of basic research and utilization methods. The focus is on preparing the student for leadership in clinical research, and research utilization.	GR	LE	Lecture
Spring 2008	NUR827	827	Population Health	NUR	Nursing	4.5	This course uses epidemiologic models to analyze and construct interventions for health care delivery systems. The focus is on safe, quality, cultually-appropriate advanced nursing practice activites to meet emerging world needs.	GR	LE	Lecture
Spring 2008	NUR830	830	Org and Sys Leadership	NUR	Nursing	4.5	Examines application of organizational and leadership theories/strategies to assess process/outcomes in complex practice settings, health care organizations, and communities with a focus on the APN role in analyzing clinical patterns and issues.	GR	LE	Lecture
Spring 2008	NUR832	832	Qual Mgmt in Hlth Care	NUR	Nursing	4.5	Examines principles and practice of quality management in health care delivery, clinical performance outcomes, patient safety and improving quality of care focusing on the role of APNS working with a collaborative team.	GR	LE	Lecture

Spring 2008	NUR834	834	Info and Tech in NSG	NUR	Nursing	4.5	Systematic assessment of clinical and administrative information needs of health care systems. Examines the technology and strategies needed to support patients, nurses, and health care delivery in dynamic environmental systems.	GR	LE	Lecture
Spring 2008	NUR836	836	Mkting in Complex Hlth	NUR	Nursing	4.5	This course examines marketing and entrepreneurial strategies for advanced nursing practice in complex health care systems. The focus is on creating and evaluating marketing plans and entrepreneurial activities.	GR	LE	Lecture
Spring 2008	NUR840	840	EB DX Methods in APN	NUR	Nursing	4.5	Examines the basis for diagnosis using lab and imaging procedures, assessing the quality and reliability/sensitivity of diagnositc tests, understanding the technology used in diagnostic testing, and utilizing cost-benefit data in ordering diagnostic testing.	GR	LE	Lecture
Spring 2008	NUR841	841	EB Admin in Complex Hlth	NUR	Nursing	4.5	Examines evidence practices in administrative health care settings focusing on current status and creating and evaluating innovative administrative practices based on best practices including model application for finance and clinical outcomes.	GR	LE	Lecture

Spring 2008	NUR850	850	Capstone Practicum DC	NUR	Nursing	9	Individually precepted practicum that requires advanced nursing practice with individuals and groups. Includes seminar that facilitates synthesis and application of all prior learning for evidence-based practice.	GR	LE	Lecture
Spring 2008	NUR851	851	Captone Practicum IC	NUR	Nursing	9	Individually precepted practicum that requires leadership and practice at the aggregate/systems/organizational level of health care. Includes required seminar that facilitates application, synthesis, and evaluation of prior learning in applied practice.	GR	LE	Lecture
Spring 2008	NUR895	895	Project Seminar	NUR	Nursing	4.5	This course provides a forum to articulate and explore advanced nursing practice roles and responsibilities. The focus will be on leading nursing practice in patient advocacy, teaching, collaboration, and the design and provision of care.	GR	LE	Lecture
Spring 2008	NUR899	899	EBP Project	NUR	Nursing	4.5	This course is a guided, independent project utilizing research to improve patient outcomes, health care delivery, or nursing practice.	GR	LE	Lecture

Spring 2008	OL301	301	Organization Leadership	OL	Organizational Leadership	4	Within a structured, coherent framework, the course will develop necessary skills in networking, communication and presentation skills. The course includes a survey of related technology and will include internet and electronic mail communication.	UG	LE	Lecture
Spring 2008	OL302	302	Contemporay Issues In Ldrshp	OL	Organizational Leadership	4	This course introduces students to contemporary leadership theories, concepts and issues. Students will examine contemporary societal and organizational forces and challenges that affect modern organizations.	UG	LE	Lecture
Spring 2008	OL303	303	Organizational Ldrshp Assessm	OL	Organizational Leadership	4	This course is designed to provide students with the opportunity to learn appropriate methods for assessment within organizational settings. This includes both individual and organization-wide assessment.	UG	LE	Lecture
Spring 2008	OL304	304	Dev & Presenting Eff Training	OL	Organizational Leadership	4	This course presents strategies to develop and present effective training. It includes progrram implementation, assessment, evaluation and supervision.	UG	LE	Lecture

Spring 2008	OL494	494	Leadership Development Seminar	OL	Organizational Leadership	4	This course provides a capstone experience for students in the Organizational Leadership Program. It focuses on developing the individual as a leader, and prepares the student for workplace marketability and organizational change management.	UG	SE	Seminar
Spring 2008	OL494W	494W	Writing in OL 494	OL	Organizational Leadership	0		UG	LB	Lab
Spring 2008	OL495	495	Leader Skill Capstone	OL	Organizational Leadership	4	In this course, students will draw upon their experiences from all of their organizational leadership courses to demonstrate their competency as administrative leaders by applying and integrating classroom material to an actual administrative problem.	UG	LE	Lecture
Spring 2008	OL495W	495W	Writing in OL 495	OL	Organizational Leadership	0		UG	LB	Lab
Spring 2008	OPH800	800	Student-Initiated Elective	OPH	Ophthalmology	4		MD	CL	Clinical
Spring 2008	OPH801	801	Ophthalmology	OPH	Ophthalmology	8		MD	CL	Clinical
Spring 2008	OPH900	900	Extramural	OPH	Ophthalmology	4		MD	H	Hospital
Spring 2008	ORS800	800	Student-Initiated Elective	ORS	Orthopedics	4		MD	CL	Clinical

Spring 2008	ORS808	808	Ortho Surgery in Children	ORS	Orthopedics	8		MD	CL	Clinical
Spring 2008	ORS809	809	Orthopedic Spine	ORS	Orthopedics	8		MD	CL	Clinical
Spring 2008	ORS810	810	Ortho Surgery (Foot, Ankle)	ORS	Orthopedics	8		MD	CL	Clinical
Spring 2008	ORS811	811	Ortho for Primary Care	ORS	Orthopedics	8		MD	CL	Clinical
Spring 2008	ORS815	815	Orthopedic Surgery	ORS	Orthopedics	8		MD	CL	Clinical
Spring 2008	ORS816	816	Physical Medicine and Rehab	ORS	Orthopedics	8		MD	CL	Clinical
Spring 2008	ORS900	900	Extramural	ORS	Orthopedics	4		MD	H	Hospital
Spring 2008	OTO800	800	Student-Initiated Elective	OTO	Otolaryngology	4		MD	CL	Clinical
Spring 2008	OTO900	900	Extramural	OTO	Otolaryngology	4		MD	H	Hospital
Spring 2008	P&B301	301	Physiology-Health & Disease I	P&B	Physiology & Biophysics	4	Subject areas include homeostasis; cell, nerve, and muscle function; nervous system regulation; and cardiovascular and circulatory systems.	UG	LE	Lecture
Spring 2008	P&B302	302	Human Physiology II	P&B	Physiology & Biophysics	4	Subject areas include gastrointestinal and metabolic systems; respiratory and renal systems; acid-base balance; endocrinology and temperature regulation.	UG	LE	Lecture

Spring 2008	P&B442	442	Intro Neurophysiology	P&B	Physiology & Biophysics	4	Studies the physiological mechanisms that subserve the functions of the nervous system. Topics include the biophysics of neuronal information, intercellular communications, motor control, sensory systems, and developmental neurobiology.	UG	LE	Lecture
Spring 2008	P&B488	488	Independent Reading-Physiology	P&B	Physiology & Biophysics	1	Independent reading in physiological literature. A written report is required for each registered period. Optional pass/fail or letter grade.	UG	IS	Independent Study
Spring 2008	P&B499	499	Special Problems in Physiology	P&B	Physiology & Biophysics	1	Specialized program that gives seniors an opportunity to explore potential careers in physiology. Studies may vary from working with instructor on an ongoing physiological research project to analysis of data obtained from completed research project.	UG	IS	Independent Study
Spring 2008	P&B501	501	Human Physiology I	P&B	Physiology & Biophysics	4	Includes homeostasis; cell, nerve, and muscle function; nervous system regulation; and cardiovascular and circulatory systems.	GR	LE	Lecture
Spring 2008	P&B502	502	Human Physiology II	P&B	Physiology & Biophysics	4	Includes gastrointestinal and metabolic systems; respiratory and renal systems; acid-base balance; endocrinology; and temperature regulation.	GR	LE	Lecture
Spring 2008	P&B601	601	Cell Physiology & Biophysics	P&B	Physiology & Biophysics	4	Fundamentals of cellular homeostasis and the role of specialized cells in organismal homeostasis	GR	LE	Lecture

Spring 2008	P&B602	602	P&B of Cells & Systems II	P&B	Physiology & Biophysics	4	Epithelial solute and water transport; the control of intracellular pH and role in cellular growth; gastrointestinal mucosal transport; hormonal adaptation; and muscle energetics and exercise.	GR	LE	Lecture
Spring 2008	P&B610	610	Human Physiology	P&B	Physiology & Biophysics	5	An overview of human/mammalian organ physiology. Fundamental mechanisms and the experimental basis for current understanding is emphasized. Prerequisite: Introductory biology, chemistry, physics, or permission of instructor.	GR	LE	Lecture
Spring 2008	P&B642	642	Introductory Neurophysiology	P&B	Physiology & Biophysics	4	Physiological mechanisms that subserve the functions of the nervous system. Topics include the biophysics of neuronal information, intercellular communications, motor control, sensory systems, and developmental neurobiology.	GR	LE	Lecture
Spring 2008	P&B650	650	Glial Cell Physiology	P&B	Physiology & Biophysics	3	Concepts of glial cell physiology based on the analysis of current primary literature. Topics include interactions between glia and other cell types and the role of glia in pathophysiology.	GR	LE	Lecture

Spring 2008	P&B666	666	Introduction to P&B	P&B	Physiology & Biophysics	3	Each student participates in a one-week tutorial study with each P&B faculty member. Tutorials are given sequentially over the fall quarter for entering P&B Master of Science students. Learning opportunities include readings, discussions, and written assignments. May be taken for a letter grade or pass/unsatisfactory.	GR	IS	Independent Study
Spring 2008	P&B669	669	Quant Aspct-Membrane Transport	P&B	Physiology & Biophysics	3	Employs a quantitative approach to the properties of solutes, water, bio-electrical phenomena, the properties of transport systems that move solutes across biological membranes, and the interactions of these solutes with membranes. Completion of calculus, cell biology, and cellular physiology and biophysics required. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	P&B699	699	Special Problems in Physiology	P&B	Physiology & Biophysics	1	Enables students to explore potential careers in physiology. Varies from working on an ongoing physiological research project to historical survey related to a completed research project. May be taken for a letter grade or pass/unsatisfactory.	GR	IS	Independent Study

Spring 2008	P&B701	701	Selected Topics in Physiology	P&B	Physiology & Biophysics	1	A selected area is discussed in greater detail than in the basic courses (P&B 702, 703). Some topics may include laboratory	GR	LL	Lecture/Lab Combination
Spring 2008	P&B702	702	Basic Human Phsiology I	P&B	Physiology & Biophysics	6	Homeostasis, cell function, muscle action, nervous system integration, and circulation. 4 hours lecture, 2 hours lab, conference.	GR	LE	Lecture
Spring 2008	P&B702L	702L	Basic Human Physiology I Lab	P&B	Physiology & Biophysics	0	Required laboratory for P&B 702.	GR	LB	Lab
Spring 2008	P&B703	703	Basic Human Physiology II	P&B	Physiology & Biophysics	4	Negative feedback regulation; metabolism; gastrointestinal, pulmonary, renal, and endocrine functions; and integrative functions. 4 hours lecture, 2 hours lab, conference.	GR	LE	Lecture
Spring 2008	P&B703L	703L	Basic Human Physiology II Lab	P&B	Physiology & Biophysics	0	required laboratory for P&B 703.	GR	LB	Lab
Spring 2008	P&B704	704	Fluorescence	P&B	Physiology & Biophysics	1	Covers the theoretical basis for fluorescence and instrument design in this methods-oriented course. Applications of interest to the physiological and biochemical sciences will be discussed. Graded pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	P&B720	720	Neurophysiology	P&B	Physiology & Biophysics	3	Topics address the representation, processing, and transmission of neuronal information, and the role of neuronal circuits in motor control and sensory systems.	GR	LE	Lecture

Spring 2008	P&B722	722	Ion Channels	P&B	Physiology & Biophysics	4	This course explores the role of ion channels in a variety of cell types with an emphasis on both electrophysiological and biochemical methods for evaluation of channel function.	GR	LE	Lecture
Spring 2008	P&B729	729	Rprdctve Phys & Embryonic Dvlp	P&B	Physiology & Biophysics	3	Cellular and molecular analysis of hormonal controls in reproduction and the developing embryo.	GR	LE	Lecture
Spring 2008	P&B733	733	Cardiovascular Physiology	P&B	Physiology & Biophysics	3	Survey of the physiology of the human cardiovascular system; components and control, cell, organ, and system level. Both newborn and adult are included, as well as adjustments to exercise and non-exercise stress.	GR	LE	Lecture
Spring 2008	P&B741	741	Pulmonary Physiology	P&B	Physiology & Biophysics	3	Survey of the respiratory vascular and biochemical mechanisms involved in transport of oxygen and carbondioxide from atmosphere to cells. Nonrespiratory functions of the lung are also discussed.	GR	LE	Lecture
Spring 2008	P&B751	751	Molecular Basis of Secretion	P&B	Physiology & Biophysics	3	Explores current hypothesis for the formation, sorting, and release of secretory vesicles at a molecular level integrating ideas from cell biology, neuroscience, and membrane biophysics. Methodology is emphasized.	GR	LE	Lecture

Spring 2008	P&B761	761	Gastrointestinal P&B	P&B	Physiology & Biophysics	3	Principles of gastrointestinal physiology and biophysics emphasizing cellular mechanisms of secretion, absorption, and motility.	GR	LE	Lecture
Spring 2008	P&B771	771	General Endocrinology	P&B	Physiology & Biophysics	3	Survey of endocrinological mechanisms and their role in integration of body function.	GR	LE	Lecture
Spring 2008	P&B776	776	Intercellular Communication	P&B	Physiology & Biophysics	4	Introduces the concepts of intercellular communication through an interdisciplinary presentation of immune and neuroendocrine system functions. Emphasizes the similarities between the systems and the multidis-ciplinary approaches used to study each.	GR	LE	Lecture
Spring 2008	P&B777	777	Medical Neuroscience	P&B	Physiology & Biophysics	7	Interdisciplinary/interdepartmental course for graduate and medical students that integrates basic and clinical neurosciences. Structural and functional topics are combined with clinical information to address major neurological and psychiatric disorders.	GR	LE	Lecture
Spring 2008	P&B783	783	Exercise Physiology	P&B	Physiology & Biophysics	5	Integration of physiological mechanisms involved in exercise. Cellular, neuromuscular, cardiovascular, and respiratory changes are discussed with relationship to exercise performance. 4 hours lecture, 2 hours lab, student recitation.	GR	LE	Lecture

Spring 2008	P&B783L	783L	Exercise Physiology Lab	P&B	Physiology & Biophysics	0	Required laboratory for P&B 783.	GR	LB	Lab
Spring 2008	P&B789	789	Continuing Registration	P&B	Physiology & Biophysics	1	A student must be registered at the graduate level in the quarter in which the degree is granted or in which some service is being rendered by the department, such as thesis writing.	GR	IS	Independent Study
Spring 2008	P&B792	792	Mechanisms of Cell Death	P&B	Physiology & Biophysics	3	Signalling and Molecular mechanisms of Apoptotic Cell Death and relationship to human diseases.	GR	LE	Lecture
Spring 2008	P&B800	800	Seminar	P&B	Physiology & Biophysics	1	Students organize and present material to colleagues and faculty.	GR	SE	Seminar
Spring 2008	P&B805	805	Gen Biophysics Seminar	P&B	Physiology & Biophysics	2	Faculty and students present scientific information/findings.	GR	SE	Seminar
Spring 2008	P&B808	808	Neuroscience Seminar	P&B	Physiology & Biophysics	1	Students present a current scientific article to colleagues and faculty. Graded pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	P&B860	860	Prin Biomedical Research	P&B	Physiology & Biophysics	1	Principles of Biomedical Research is appropriate for students that will be involved in Biomedial Research. PBR provides a lecture and student interactive series designed to introduce students to the basic of Biomedical Research.	GR	LE	Lecture

Spring 2008	P&B870	870	Phys & Pharm-Vascular Cells	P&B	Physiology & Biophysics	3	Physiological steady state and pharmacological properties of vascular cells circulating erythrocytes, endothelial cells and smooth muscle cells in particular as a basis of pathophysiologic aberrations and clinical disorders.	GR	LE	Lecture
Spring 2008	P&B899	899	Physiology Research	P&B	Physiology & Biophysics	2	Supervised thesis research.	GR	IS	Independent Study
Spring 2008	PED600	600	Student Initiated Elective	PED	Pediatrics	2		MD	LE	Lecture
Spring 2008	PED602	602	Undstd/Coping Chronic Disease	PED	Pediatrics	2		MD	LE	Lecture
Spring 2008	PED603	603	Infections Infants/Children	PED	Pediatrics	2		MD	CL	Clinical
Spring 2008	PED604	604	Cystic Fibrosis	PED	Pediatrics	2		MD	CL	Clinical
Spring 2008	PED605	605	Nutrition: Infants, Children	PED	Pediatrics	2		MD	LE	Lecture
Spring 2008	PED606	606	Child Abuse and Neglect	PED	Pediatrics	2		MD	CL	Clinical
Spring 2008	PED700	700	Pediatric Clerkship	PED	Pediatrics	16		MD	CL	Clinical
Spring 2008	PED800	800	Student-Initiated Elective	PED	Pediatrics	4		MD	CL	Clinical
Spring 2008	PED803	803	Scope of Community Pediatrics	PED	Pediatrics	8		MD	CL	Clinical

Spring 2008	PED804	804	Ped Hematology-Oncology	PED	Pediatrics	8		MD	CL	Clinical
Spring 2008	PED805	805	Adolescent Endocrinology	PED	Pediatrics	8		MD	CL	Clinical
Spring 2008	PED806	806	Ped Infectious Diseases	PED	Pediatrics	8		MD	CL	Clinical
Spring 2008	PED807	807	JI Pediatrics	PED	Pediatrics	8		MD	CL	Clinical
Spring 2008	PED814	814	Ped Pulmonary Medicine	PED	Pediatrics	8		MD	CL	Clinical
Spring 2008	PED815	815	Ped Gastroenterology	PED	Pediatrics	8		MD	CL	Clinical
Spring 2008	PED816	816	Ped Cardiology	PED	Pediatrics	8		MD	CL	Clinical
Spring 2008	PED819	819	Ped Critical Care Medicine	PED	Pediatrics	8		MD	CL	Clinical
Spring 2008	PED900	900	Extramural	PED	Pediatrics	4		MD	H	Hospital
Spring 2008	PHA701	701	Selected Topics-Pharmacology	PHA	Pharmacology_SC	2	Topics vary.	GR	LE	Lecture
Spring 2008	PHA740	740	Intercellular Communication	PHA	Pharmacology_SC	4	Introduces the concepts of intercellular communication through an interdisciplinary presentation of immune and neuroendocrine system functions. Emphasizes the similarities between the systems and the multidisciplinary approaches used to study each.	GR	LE	Lecture

Spring 2008	PHA870	870	Phys & Pharm of Vascular Cells	PHA	Pharmacology_SC	3	Physiological steady state and pharmacological properties of vascular cells circulating erythrocytes, endothelial cells, and smooth muscle cells in particular as a basis of pathophysiologic aberrations and clinical disorders.	GR	LE	Lecture
Spring 2008	PHA898	898	Neuropharmacology	PHA	Pharmacology_SC	3	In-depth treatment of the anatomy, biochemistry, physiology, and functions of neurotransmitter systems and the effects of drugs on the nervous system.	GR	LE	Lecture
Spring 2008	PHA899	899	Pharmacology Research	PHA	Pharmacology_SC	1	Supervised thesis research.	GR	LB	Lab
Spring 2008	PHL124	124	Social Ethics and Values	PHL	Philosophy	3	Investigation of fundamental ethical issues in our society. Includes such issues as power, law, race, war, population, ecology, violence vs. pacifism, and punishment vs. rehabilitation.	UG	LE	Lecture
Spring 2008	PHL200	200	Critical Thinking	PHL	Philosophy	4	Introduction to fundamental reasoning skills: recognizing the differences between facts and opinions, distinguishing relevant from irrelevant information, identifying unstated assumptions, detecting bias, recognizing fallacious reasoning, and evaluating claims, definitions, and arguments.	UG	LE	Lecture
Spring 2008	PHL200W	200W	Writing in PHL 200	PHL	Philosophy	0	Required writing component for PHL 200.	UG	LB	Lab

Spring 2008	PHL204	204	Great Books: Philosophy	PHL	Philosophy	4	Introduction to selected great books in the history of Western philosophy chosen from each of three eras (ancient/medieval, modern, and contemporary) and examined both within their respective historical frameworks and as an exercise in critical thinking.	UG	LE	Lecture
Spring 2008	PHL204W	204W	Writing in PHL 204	PHL	Philosophy	0	Required writing component for PHL 204.	UG	LB	Lab
Spring 2008	PHL211	211	Introduction to Ethics	PHL	Philosophy	4	Survey of the important theories concerning the nature of moral value and obligation.	UG	LE	Lecture
Spring 2008	PHL211W	211W	Writing in PHL 211	PHL	Philosophy	0		UG	LB	Lab
Spring 2008	PHL212	212	Introduction to Metaphysics	PHL	Philosophy	3	Survey of the important theories concerning the nature of reality, mind and body, and freedom and determinism.	UG	LE	Lecture
Spring 2008	PHL213	213	Theories of Knowledge	PHL	Philosophy	3	Survey of the important theories concerning the origin, structure, methods, certainty, and validity of knowledge.	UG	LE	Lecture
Spring 2008	PHL215	215	Inductive Logic	PHL	Philosophy	4	Introduction to the techniques of inductive and probabilistic reasoning with emphasis on the problems encountered in attempting to justify those techniques.	UG	LE	Lecture
Spring 2008	PHL223	223	Symbolic Logic I	PHL	Philosophy	4	Introduction to the techniques of deductive logic including truth-table analysis, the prepositional calculus, and predicate logic.	UG	LE	Lecture

Spring 2008	PHL280	280	Phl of Religion: Faith&Reason	PHL	Philosophy	3	Selected cross-disciplinary issues arising from philosophy and religion: Judeo-Christian concept of God, grounds for belief and disbelief, revelation and faith, religious language, verification, immortality and resurrection, and karma and reincarnation. Issues are discussed on the basis of selected texts on faith and reason.	UG	LE	Lecture
Spring 2008	PHL281	281	Phl of Rel:Contemp West Survey	PHL	Philosophy	3	Cross-disciplinary perspective on philosophical and religious schools of thought in the early 20th century. Absolute and personal idealism, spirit, value, positivism and naturalism, history and culture, modernism and pragmatism, religious consciousness, and phenomenology.	UG	LE	Lecture
Spring 2008	PHL301	301	Ancient Philosophy	PHL	Philosophy	4	Pre-Socratics, Plato, Aristotle, Epicureanism, Stoicism, Skepticism, Neo-Platonism. Topics vary.	UG	LE	Lecture
Spring 2008	PHL302	302	Medieval Philosophy	PHL	Philosophy	4	Augustine, Anselm, Aquinas, Scotus, Occam. Topics vary.	UG	LE	Lecture
Spring 2008	PHL302W	302W	Writing in PHL 302	PHL	Philosophy	0	Required writing component for PHL 302.	UG	LB	Lab
Spring 2008	PHL303	303	Modern Philosophy	PHL	Philosophy	4	Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant, Hegel, Schopenhauer, Topics vary.	UG	LE	Lecture
Spring 2008	PHL303W	303W	Writing in PHL 303	PHL	Philosophy	0		UG	LB	Lab

Spring 2008	PHL305	305	American Philosophy	PHL	Philosophy	4	Survey of American philosophy from Jonathan Edwards to John Dewey, including Transcendentalism (Emerson, Thoreau), Idealism (Royce), Pragmatism (Peirce, James), and Naturalism (Santayana, Dewey).	UG	LE	Lecture
Spring 2008	PHL308	308	Survey-Analytical Philosophy	PHL	Philosophy	4	Major developments in last 100 years from Frege and early views of Moore and Russell; through logical atomism (Russell; Wittgenstein) and logical positivism (Schlick; Carnap; Ayer), to more recent views of such figures as Wittgenstein and Quine.	UG	LE	Lecture
Spring 2008	PHL309	309	Metaphysics	PHL	Philosophy	4	A examination of problems concerning the nature, constituents and relations of reality.	UG	LE	Lecture
Spring 2008	PHL310	310	Theory of Knowledge	PHL	Philosophy	4	An examination of knowledge, belief, justification, and warrant.	UG	LE	Lecture
Spring 2008	PHL311	311	Ethics	PHL	Philosophy	4	Critical examination of major issues and problems of contemporary philosophical ethics. Concepts of "good," "evil," "right," "wrong," and "justice." Obligations to ourselves and others; praise, blame, punishment, and pardon; meaning and purpose of life.	UG	LE	Lecture
Spring 2008	PHL311W	311W	Writing in PHL	PHL	Philosophy	0		UG	LB	Lab

Spring 2008	PHL312	312	Moral Problems	PHL	Philosophy	4	Investigation and discussion of moral issues as they arise within major areas of society. Emphasis on studies in such areas as medicine, law, family, business, and politics. May be repeated.	UG	LE	Lecture
Spring 2008	PHL312W	312W	Writing in PHL 312	PHL	Philosophy	0	Required writing component for PHL 312.	UG	LB	Lab
Spring 2008	PHL322	322	Philisophical Logic	PHL	Philosophy	4	Concepts which border the philosophy of language, philosophy of mind, and ontology. Sample topics: predication and universals; naming, meaning, and necessity; negation, existence, and truth; logical and semantical paradoxes.	UG	LE	Lecture
Spring 2008	PHL323	323	Symbolic Logic II	PHL	Philosophy	4	Standard notations, principles of inference, formal systems, and methods of proof. Focus on first-order predicate logic.	UG	LE	Lecture
Spring 2008	PHL331	331	Political Philosophy	PHL	Philosophy	4	Analysis of classical and contemporary writings in political philosophy; includes such topics as power, sovereignty, the state, and anarchy; equality, justice, law, and liberty; consent, representation, will of the people; political rights and responsibilities.	UG	LE	Lecture
Spring 2008	PHL332	332	Studies - Political Philosophy	PHL	Philosophy	4	Courses of variable content dealing with topics in ancient and modern political philosophy. May be repeated.	UG	LE	Lecture

Spring 2008	PHL341	341	Aesthetics	PHL	Philosophy	4	Study of theories concerning the nature of the work of art, aesthetic experience, the arts, and beauty.	UG	LE	Lecture
Spring 2008	PHL351	351	Grt Scntsts & Rcnt Philosopher	PHL	Philosophy	4	Examination of philosophical importance of the theories of evolution, psychoanalysis, dialectical materialism, and space-time relativity.	UG	LE	Lecture
Spring 2008	PHL371	371	Business Ethics	PHL	Philosophy	4	Case study and discussion of ethical issues involved in business transactions and management.	UG	LE	Lecture
Spring 2008	PHL378	378	Ethics and Medicine	PHL	Philosophy	4	Examination of ethical issues confronting society in the areas of medicine and health care, from the perspective of philo-sophical and theological ethics. Examples include ethics of abortion, euthanasia, experimental medicine, and behavior control.	UG	LE	Lecture
Spring 2008	PHL378W	378W	Writing in PHL 378	PHL	Philosophy	0		UG	LB	Lab
Spring 2008	PHL382	382	Philosophy of Religion:Process	PHL	Philosophy	4	Realism and the revolt against idealism. Cross-disciplinary analysis of major contemporary philosophers and the implications of their thoughts for religion. Focus on Alfred North Whitehead.	UG	LE	Lecture

Spring 2008	PHL383	383	Philosophy of Religion:Secular	PHL	Philosophy	4	Cross-disciplinary analysis of modes of human awareness through which religious meaning is expressed (sensation, morality, beauty, reason, and human relations). Examination of presuppositions of contemporary secular religion in existentialism.	UG	LE	Lecture
Spring 2008	PHL394	394	Existtentialism	PHL	Philosophy	4	Representative writers of the existentialist movement.	UG	LE	Lecture
Spring 2008	PHL399	399	Studies in Selected Subjects	PHL	Philosophy	1	Problems, approaches, and topics in the field of philosophy. Topics vary.	UG	LE	Lecture
Spring 2008	PHL399W	399W	Writing in PHL 399	PHL	Philosophy	0	Required writing component for PHL 399.	UG	LB	Lab
Spring 2008	PHL401	401	Major Philosophers	PHL	Philosophy	4	Introduction to the major writings of outstanding philosophers. Involves presentation and critical examination of the philosophers' views.	UG	LE	Lecture
Spring 2008	PHL411	411	Ethical Theory	PHL	Philosophy	4	Critical examination of major theories of value and obligation. The best theory of value and obligation; assessment and measurement of values; the role of values in deliberation and decision-making, and in explanations of behavior.	UG	LE	Lecture
Spring 2008	PHL411W	411W	Writing in PHL 411	PHL	Philosophy	0		UG	LB	Lab

Spring 2008	PHL414	414	Philosophy of Law	PHL	Philosophy	4	Survey of the important theories concerning the nature and justification of law, liberty, justice, responsibility, and punishment.	UG	LE	Lecture
Spring 2008	PHL415	415	Philosophical Problems	PHL	Philosophy	4	Detailed examination of one of the outstanding philosophical problems-ancient, medieval, and/or contemporary.	UG	LE	Lecture
Spring 2008	PHL423	423	Advanced Logic	PHL	Philosophy	4	This course treats logic as an object rather than a subject. Although it contains extensions to higher order logic, its main concern will be with the use of logic and with the limitations of logical systems.	UG	LE	Lecture
Spring 2008	PHL424	424	Mathematical Philosophy	PHL	Philosophy	4	Investigation of philosophical theories concerning the nature of mathematics, the ground of mathematical knowledge, the necessity of mathematical truth, the empirical relevance of mathematics, and the relationships between mathematical philosophy and general philosophy.	UG	LE	Lecture
Spring 2008	PHL425	425	Philosophy of Language	PHL	Philosophy	4	An introduction to different theories of meaning, to different theories of signs, and to the problems of ambiguity, vagueness, denotation, connotation, and metaphor.	UG	LE	Lecture

Spring 2008	PHL431	431	Classical & Medieval Pol Phil	PHL	Philosophy	4	Critical examination of political ideas from 500 B.C. to A.D. 1500 with special attention to Plato, Aristotle, Cicero, St. Augustine, St. Thomas Aquinas, Luther, Calvin, and Machiavelli.	UG	LE	Lecture
Spring 2008	PHL432	432	Modern Political Philosophy	PHL	Philosophy	4	Critical examination of political ideas from 1600 to 1900, with special attention to Hobbes, Locke, Rousseau, Montesquieu, Hume, Burke, Hegel, Bentham, Marx, and Mill.	UG	LE	Lecture
Spring 2008	PHL442	442	Philosophy and Literature	PHL	Philosophy	4	Examination of philosophical ideas found in literature, philosophical interpretations of literature, and evaluation of theories and aesthetics of literature.	UG	LE	Lecture
Spring 2008	PHL443	443	Asian Religious Philosophy	PHL	Philosophy	4	Perennial themes in Asian cultures (such as individual, society, and cosmos; appearance and reality; time and history; and karma, freedom, and responsibility) as they have been treated in the philosophical traditions of these cultures.	UG	LE	Lecture
Spring 2008	PHL465	465	Advanced Analysis	PHL	Philosophy	4	Investigation of certain problems and attempted solutions that have occupied major contemporary Anglo-American philosophers such as Moore, Russell, Wittgenstein, Carnap, Ryle, Austin, Strawson, and Quine.	UG	LE	Lecture

Spring 2008	PHL467	467	philosophy of Mind	PHL	Philosophy	4	Classical and contemporary approaches to such issues as the nature of mind, relationships of mind to body, knowledge of other minds, intentionality, perception, and agency.	UG	LE	Lecture
Spring 2008	PHL467W	467W	Writing in PHL 467	PHL	Philosophy	0		UG	LB	Lab
Spring 2008	PHL471	471	Philosophy of Physical Science	PHL	Philosophy	4	Analysis of views concerning scientific explanation, the logic of theory testing, and the ontological status of theoretical entities; philosophical examination of the concepts of space, time, matter, and motion from classical physics to contemporary relativity.	UG	LE	Lecture
Spring 2008	PHL472	472	Philosophy of Social Science	PHL	Philosophy	4	Analysis of views concerning concept and theory formation in the social sciences, problems in objectivity and value, justification of Verstehen, mechanism vs. teleological explanations, and reductionism.	UG	LE	Lecture
Spring 2008	PHL481	481	Independent Reading	PHL	Philosophy	3	Faculty-directed readings in philosophic literature.	UG	IS	Independent Study
Spring 2008	PHL482	482	Independent Reading	PHL	Philosophy	3	Faculty-directed readings in philosophic literature.	UG	IS	Independent Study
Spring 2008	PHL483	483	Independent Reading	PHL	Philosophy	3	Faculty-directed readings in philosophic literature.	UG	IS	Independent Study
Spring 2008	PHL495	495	Metaphysics	PHL	Philosophy	4	Investigation of classical and contemporary attempts to develop a theory of the nature of being and reality.	UG	LE	Lecture

Spring 2008	PHL496	496	Problems of Knowledge	PHL	Philosophy	4	Origin, certainty, and extent of human knowledge.	UG	LE	Lecture
Spring 2008	PHL497	497	SR Project Philosophy	PHL	Philosophy	4	Guided research culminating in a major paper on a topic chosen by the student and instructor. Students develop a comprehensive bibliography, prepare a detailed outline, and write and revise the final project.	UG	IS	Independent Study
Spring 2008	PHL532	532	Studies - Political Philosophy	PHL	Philosophy	4	Courses of variable content dealing with topics in ancient and modern political philosophy. May be repeated.	GR	LE	Lecture
Spring 2008	PHL541	541	Aesthetics	PHL	Philosophy	4	Study of theories concerning the nature of the work of art, aesthetic experience, the arts, and beauty.	GR	LE	Lecture
Spring 2008	PHL578	578	Ethics and Medicine	PHL	Philosophy	4	Ethical issues confronting society in the area of medicine and health care, considered from the perspective of philosophical and theological ethics. Examples include ethics of abortion, euthanasia, experimental medicine, and behavior control.	GR	LE	Lecture
Spring 2008	PHL582	582	Philosophy of Religion:Process	PHL	Philosophy	4	(Listed jointly with REL 582.) Realism and the revolt against idealism. Cross-disciplinary analysis of major contemporary process philosophers, and the implications of their thoughts for religion. Focus on Alfred North Whitehead.	GR	LE	Lecture

Spring 2008	PHL583	583	Philosophy of Religion:Secular	PHL	Philosophy	4	(Listed jointly with REL 583.) Cross-disciplinary analysis of modes of human awareness through which religious meaning is expressed. Examination of presuppositions of contemporary secular religious movements in existentialism. The problem of the ultimate from the secular perspective.	GR	LE	Lecture
Spring 2008	PHL599	599	Studies in Selected Subjects	PHL	Philosophy	1	Problems, approaches, and topics in the field of philosophy.	GR	LE	Lecture
Spring 2008	PHL601	601	Major Philosophers	PHL	Philosophy	4	Introduction to the major writings of the outstanding philosophers. Involves presentation and critical examination of the philosophers' views. Titles vary.	GR	LE	Lecture
Spring 2008	PHL623	623	Advanced Logic	PHL	Philosophy	3	(Listed jointly with Mth 623.) Treats logic as an object rather than as a subject. Although it contains extensions to higher order, its main concern is with use of logic and with limitations of logical systems.	GR	LE	Lecture

Spring 2008	PHL624	624	Mathematical Philosophy	PHL	Philosophy	4	Investigation of philosophical theories concerning the nature of mathematics, the ground of mathematical knowledge, the necessity of mathematical truth, the empirical relevance of mathematics, and the relationships between mathematical philosophy and general philosophy.	GR	LE	Lecture
Spring 2008	PHL631	631	Clsscl & Medieval & Pltcl Phil	PHL	Philosophy	4	(Listed jointly with PLS 601.) Critical examination of political ideas from 500 B.C. to 1500 A.D. with emphasis on Plato, Aristotle, Cicero, St. Augustine, St. Thomas, Aquinas, Luther, Calvin, and Machiavelli.	GR	LE	Lecture
Spring 2008	PHL632	632	Modern Political Philosophy	PHL	Philosophy	4	Critical examination of political ideas from 1600 to 1900 with emphasis on Hobbes, Locke, Rousseau, Montesquieu, Hume, Burke, Hegel, Bentham, Marx, and Mill.	GR	LE	Lecture
Spring 2008	PHL642	642	Philosophy and Literature	PHL	Philosophy	4	Examination of philosophical ideas found in literature, philosophical interpretations of literature, and evaluations of theories and aesthetics of literature.	GR	LE	Lecture

Spring 2008	PHL643	643	Asian Religous Philosophy	PHL	Philosophy	4	Perennial themes in Asian cultures, such as individual, society, and cosmos; appearance and reality; time and history; and karma, freedom, and responsibility. Treatment of these themes in the philosophical traditions of Asian cultures.	GR	LE	Lecture
Spring 2008	PHL667	667	Philosophy of Mind	PHL	Philosophy	4	Classical and contemporary approaches to such issues as the nature of mind, relationships of mind to body, knowledge of other minds, intentionality, perception, and agency.	GR	LE	Lecture
Spring 2008	PHL681	681	Independent Reading	PHL	Philosophy	3	Faculty-directed readings in philosophical literature.	GR	LE	Lecture
Spring 2008	PHL682	682	Independent Reading	PHL	Philosophy	3	Faculty-directed readings in philosophical literature.	GR	LE	Lecture
Spring 2008	PHL683	683	Independent Reading	PHL	Philosophy	3	Faculty-directed readings in philosophical literature.	GR	IS	Independent Study
Spring 2008	PHL694	694	Existentialism	PHL	Philosophy	4	Representative writers of the existentialist movement.	GR	LE	Lecture
Spring 2008	PHL695	695	Metaphysics	PHL	Philosophy	4	Investigation of classical and contemporary attempts to develop a theory of the nature of being and reality.	GR	LE	Lecture
Spring 2008	PHL696	696	Epistemology	PHL	Philosophy	4	Origin, certainty, and extent of human knowledge	GR	LE	Lecture
Spring 2008	PHL751	751	Research in Philosophy	PHL	Philosophy	1	Independent study.	GR	IS	Independent Study
Spring 2008	PHL752	752	Research in Philosophy	PHL	Philosophy	1	Independent study.	GR	IS	Independent Study
Spring 2008	PHL753	753	Research in Philosophy	PHL	Philosophy	1	Independent study.	GR	IS	Independent Study

Spring 2008	PHR340	340	Pharmacology	PHR	Pharmacology	3	Introduction to general principles of pharmacology, drug classification, and the sites and mode of action of selected drug agents.	UG	LE	Lecture
Spring 2008	PHR410	410	Intro to Pharmacology	PHR	Pharmacology	3	Covers basic principles of pharmacology, including dose-response relationships, mechanisms of drug action and resistance, the concept of drug receptors and specific binding, and biological transport and distribution of drugs.	UG	LE	Lecture
Spring 2008	PHR495	495	Honors Pharmacology Res	PHR	Pharmacology	2	Experiential learning for honors program students interested in basic biomedical research. Tutorial with laboratory.	UG	LB	Lab
Spring 2008	PHR499	499	Undergraduate Research	PHR	Pharmacology	1	Experiential learning in which students participate in ongoing research projects. Tutorial with laboratory.	UG	IS	Independent Study
Spring 2008	PHY101	101	Principles of Physics Lab	PHY	Physics	1	Introductory-level laboratory problems.	UG	LB	Lab
Spring 2008	PHY102	102	Principles of Physics Lab	PHY	Physics	1	Introductory-level laboratory problems.	UG	LB	Lab
Spring 2008	PHY103	103	Principles of Physics Lab	PHY	Physics	1	Introductory-level laboratory problems.	UG	LB	Lab
Spring 2008	PHY105	105	Sounds and Colors	PHY	Physics	3	Study of wave motion with an orientation toward phenomena experienced by our senses, such as musical sounds, noise, and the colors occurring in nature.	UG	LE	Lecture

Spring 2008	PHY106	106	Planetary Astronomy	PHY	Physics	3	Introduction to astronomy with emphasis on the solar system. Topics include the earth-moon system, other planets and their satellites, space exploration, and theories for the origin of the solar system.	UG	LE	Lecture
Spring 2008	PHY107	107	Stars, Galaxies, & The Cosmos	PHY	Physics	3	Introduction to astronomy with emphasis on the universe of stars and galaxies. Covers stellar evolution, astrophysics, and cosmology.	UG	LE	Lecture
Spring 2008	PHY111	111	Principles of Physics	PHY	Physics	4	Introduction to the fundamental physics of mechanics. Topics include laws of motion, work and energy, momentum, circular and rotational motion, gravity, and fluids.	UG	LE	Lecture
Spring 2008	PHY111R	111R	Principles-Physics Recitation	PHY	Physics	0	Required recitation for PHY 111.	UG	RE	Recitation
Spring 2008	PHY112	112	Principles of Physics	PHY	Physics	4	Introduction to the fundamental physics of waves, thermodynamic laws, electric charge and field, electric current, and DC circuits.	UG	LE	Lecture
Spring 2008	PHY112R	112R	Principles-Physics Recitation	PHY	Physics	0	Required recitation for PHY 112.	UG	RE	Recitation

Spring 2008	PHY113	113	Principles of Physics	PHY	Physics	4	Introduction to the fundamentals of magentism, optics and modern physics. Topics include magnetic fields, electromagnetic induction, electromagnetic waves, geometric and wave optics, optical instruments, relativity, quantum theory, and nuclear physics.	UG	LE	Lecture
Spring 2008	PHY113R	113R	Principles-Physics Recitation	PHY	Physics	0	Required recitation for PHY 113.	UG	RE	Recitation
Spring 2008	PHY115	115	Sounds and Colors Laboratory	PHY	Physics	1	Experiments to illustrate the physical aspects of what we see and hear.	UG	LB	Lab
Spring 2008	PHY116	116	Planetary Astronomy Laboratory	PHY	Physics	1	Astronomical observations and experiments.	UG	LB	Lab
Spring 2008	PHY117	117	Stars,Galaxies & Cosmos Lab	PHY	Physics	1	Astronomical observations and measurements, laboratory experiments, and a visit to a plane-tarium.	UG	LB	Lab
Spring 2008	PHY117W	117W	Writing in PHY 117	PHY	Physics	0		UG	LB	Lab
Spring 2008	PHY200	200	General Physics Laboratory	PHY	Physics	1	Introductory physics laboratory problems in mechanics.	UG	LB	Lab
Spring 2008	PHY202	202	General Physics Laboratory	PHY	Physics	1	Introductory physics laboratory problems in electricity and magnetism.	UG	LB	Lab
Spring 2008	PHY204	204	General Physics Laboratory	PHY	Physics	1	Introductory physics laboratory problems in heat, sound, mechanics, and optics.	UG	LB	Lab
Spring 2008	PHY204W	204W	Writing in PHY 204	PHY	Physics	0		UG	LB	Lab

Spring 2008	PHY240	240	General Physics	PHY	Physics	4	Introductory survey of mechanics for science and engineering students. Introduces the use of calculus in interpreting physical phenomena. Topics include vectors, kinematics, dynamics, energy, momentum, rotation, and statics. Three hours lecture, one hour recitation.	UG	LE	Lecture
Spring 2008	PHY240R	240R	General Physics Recitation	PHY	Physics	0	Required recitation for PHY 240.	UG	RE	Recitation
Spring 2008	PHY242	242	General Physics	PHY	Physics	4	Introductory survey of electricity and magnetism. Uses calculus in interpreting physical phenomena. Topics include electric field and potential, currents, DC circuits, magnetic fields, and Faraday's law. Three hours lecture, one hour recitation.	UG	LE	Lecture
Spring 2008	PHY242R	242R	General Physics Recitation	PHY	Physics	0	Required recitation for PHY 242.	UG	RE	Recitation
Spring 2008	PHY244	244	General Physics	PHY	Physics	5	Introductory survey of thermodynamics, oscillations and waves, sounds, fluids, gravity, and optics. Calculus is required in interpreting physical phenomena.	UG	LE	Lecture
Spring 2008	PHY244R	244R	General Physics Recitation	PHY	Physics	0	Required recitation for PHY 244.	UG	RE	Recitation

Spring 2008	PHY245	245	Concepts in Physics	PHY	Physics	4.5	An accelerated treatment of fundamental concepts and applications of physics for elementary education majors. Practical observable topics appropriate for presentation to elementary and middle school students will be emphasized. Includes laboratory experiences, demonstrations, and projects.	UG	LL	Lecture/Lab Combination
Spring 2008	PHY246	246	Concepts & Appl in Physics I	PHY	Physics	4.5	Basic concepts and everyday applications of physics topics including motion, forces and energy. Topics are integrated with Mathematics.	UG	LL	Lecture/Lab Combination
Spring 2008	PHY260	260	Intro-Modern Physics	PHY	Physics	4	Introduces phenomenology and theoretical concepts of modern physics, such as special theory of relativity and quantum theory; atomic and molecular structure and spectra; x-rays and solid state physics; nuclear structure, reactions, and natural radioactivity; and instrumentation for nuclear physics research. One hour is devoted to demonstrations and recitations.	UG	LL	Lecture/Lab Combination
Spring 2008	PHY260L	260L	Intro-Modern Physics Lab	PHY	Physics	0	Required laboratory for PHY 260.	UG	LB	Lab
Spring 2008	PHY260W	260W	Writing in PHY 260	PHY	Physics	0	Required writing component for PHY 260.	UG	LB	Lab
Spring 2008	PHY310	310	Issues in Science	PHY	Physics	3	A writing intensive course dealing with issues in science	UG	LE	Lecture

Spring 2008	PHY314	314	Intermediate Physics	PHY	Physics	2	Intermediate-level laboratory problems. Acquaints students with wide variety of experimental techniques in many areas of classical and modern physics.	UG	LE	Lecture
Spring 2008	PHY314L	314L	Intermediate Physics Lab	PHY	Physics	0	Required laboratory for PHY 314.	UG	LB	Lab
Spring 2008	PHY315	315	Physics Instrumentation I	PHY	Physics	3	Physics laboratory experiments with an emphasis on electrical measurements and electronic instru-ments. Lectures on circuit theory, experiment design, and electronic instruments. 1.5 hours lecture, three hours lab.	UG	LE	Lecture
Spring 2008	PHY315L	315L	Physics Instrumentation Lab I	PHY	Physics	0	Required laboratory for PHY 315.	UG	LB	Lab
Spring 2008	PHY316	316	Physics Instrumentation II	PHY	Physics	3	Experiments emphasizing electronic instruments applied to areas such as mechanics, atomic physics, and nuclear physics. Lectures on appli-cations of integrated circuits to experimentation, data analysis, and data presentation. 1.5 hours lecture, three hours lab.	UG	LE	Lecture
Spring 2008	PHY316L	316L	Physics Instrumentation Lab II	PHY	Physics	0	Required laboratory for PHY 316.	UG	LB	Lab
Spring 2008	PHY316W	316W	Writing in PHY	PHY	Physics	0		UG	LB	Lab

Spring 2008	PHY322	322	Applied Optics	PHY	Physics	4	Study of optical instruments by means of both geometrical and physical optics. Theory and application of interferometry and light detection devices. Brief introduction to lasers and holography. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	PHY322L	322L	Applied Optics Laboratory	PHY	Physics	0	Required laboratory for PHY 322.	UG	LB	Lab
Spring 2008	PHY346	346	Concepts & Appl in Physics II	PHY	Physics	4.5	Basic concepts and applications in physics including electricity, magnetism, optics, waves, simple machines. Inquiry learning environment emphasizing science process and mathematical reasoning, problem-solving, technology and societal connections.	UG	LL	Lecture/Lab Combination
Spring 2008	PHY371	371	Analytical Mechanics	PHY	Physics	3	Intermediate problems in the dynamics of motion in 1,2 and 3 dimensions. Mathematical and computational approaches are applied to systems with non-constant forces, central forces, and oscillations.	UG	LE	Lecture

Spring 2008	PHY372	372	Analytical Mechanics	PHY	Physics	3	Problems in motion and energy of systems of particles and extended objects. Mathematical and computational approaches, including the Lagrange method, are studied and applied to rigid body motion, and motion in non-inertial coordinate systems.	UG	LE	Lecture
Spring 2008	PHY400	400	Semiconductor Materials	PHY	Physics	3	Crystal structure, energy bands, charge carriers, and carrier motion in semiconductors. Electrical and optical properties. P-N junction diodes. Equilibrium, dc, ac, and transient characteristics. Metal-Semiconductor junctions. Device design.	UG	LE	Lecture
Spring 2008	PHY401	401	Semiconductor Device Physics	PHY	Physics	3	Structure and characteristics of bipolar transistors, field effect transistors, and other selected devices. Design and computer modeling of devices.	UG	LE	Lecture
Spring 2008	PHY420	420	Thermodynamics	PHY	Physics	3	First and second laws of thermodynamics; general thermodynamic formulas with applications to matter.	UG	LE	Lecture
Spring 2008	PHY421	421	Statistical Thermodynamics	PHY	Physics	3	Topics include kinetic theory of gases, Maxwell-Boltzmann statistics, and an introduction to quantum statistics.	UG	LE	Lecture
Spring 2008	PHY422	422	Geophysical Prospecting	PHY	Physics	5	Introduction to principles of gravity, magnetic, seismic, electrical, and radioactive prospecting. Four hours lecture, two hours lab.	UG	LE	Lecture

Spring 2008	PHY422L	422L	Geophysical Prospecting Lab	PHY	Physics	0	Required laboratory for PHY 422.	UG	LB	Lab
Spring 2008	PHY423	423	Seismic Exploration	PHY	Physics	4	Study of the theory, observation, and analysis of seismic phenomena as applied to geologic exploration.	UG	LE	Lecture
Spring 2008	PHY423L	423L	Seismic Exploration Lab	PHY	Physics	0	Required laboratory for PHY 423.	UG	LB	Lab
Spring 2008	PHY424	424	Gravity & Magnetic Exploration	PHY	Physics	4	Study of the theory of the earth's gravitational and magnetic fields and the application of these principles to resource exploration. Three hours lecture, two hours lab.	UG	LE	Lecture
Spring 2008	PHY424L	424L	Gravity Exploration Lab	PHY	Physics	0	Required laboratory for PHY 424.	UG	LB	Lab
Spring 2008	PHY425	425	Topical Concepts-Geophysics	PHY	Physics	4	Special topics in Geophysics.	UG	LE	Lecture
Spring 2008	PHY425L	425L	Topicl Concepts-Geophysics Lab	PHY	Physics	0	Required laboratory for PHY 425.	UG	LB	Lab
Spring 2008	PHY426	426	Geophysics Seminar	PHY	Physics	1	Literature Survey and student presentations on selected topics in geophysics.	UG	SE	Seminar
Spring 2008	PHY432	432	Lasers	PHY	Physics	3	Introduction to the physics of lasers including emission and absorption processes in lasing, the factors controlling laser gain, the properties of optical resonators, and a survey of salient features for principal types of lasers.	UG	LL	Lecture/Lab Combination

Spring 2008	PHY437	437	Seismic Data Processing	PHY	Physics	4	Digital filtering, deconvolution and migration of seismic data.	UG	LE	Lecture
Spring 2008	PHY440	440	Intro Nanosci/Nanotech	PHY	Physics	4	Introduction to nanoscience and technology. Topics include introduction to quantum mechanics, fabrication, characterization, materials, electronic properties, optical properties, magnetic properties, devices, MEMS and NEMS.	UG	LE	Lecture
Spring 2008	PHY442	442	Physical Optics	PHY	Physics	4	Interaction of light and matter and interpretation of these phenomena using the electromagnetic wave theory of radiation. Topics include emission, absorption, scattering, polarization, interference, diffraction, coherence, and holography.	UG	LE	Lecture
Spring 2008	PHY445	445	Integrating Phys Sci & Math I	PHY	Physics	4	Integration of physics and mathematics, including science and math standards, physics education issues, inquiry teaching practices, and assessment addressed in the context of science and math process skills, measurement, and properties of matter.	UG	LE	Lecture
Spring 2008	PHY446	446	Integrating Phys Sci & Math II	PHY	Physics	4	Integration of physics and math, including science and math standards, physics education issues, inquiry teaching, practices, assessment and technology addressed in the context of kinematics, forces, and energy transfers.	UG	LE	Lecture

Spring 2008	PHY447	447	Integrating Phy Sci & Math III	PHY	Physics	4	Integration of physics and mathematics, science and math standards, physics education issues, inquiry teaching, assessment, technology will be addressed in the context of electricity, magnetism, waves, optics.	UG	LE	Lecture
Spring 2008	PHY450	450	Electricity and Magnetism	PHY	Physics	3	Fundamental laws of electricity and magnetism from viewpoint of fields. Review of vector analysis; electrostatics; special techniques in electrostatics; magnetostatics.	UG	LE	Lecture
Spring 2008	PHY451	451	Electricity and Magnetism	PHY	Physics	3	Fundamental laws of electricity and magnetism from viewpoint of fields. Electric fields in matter; magnetic fields in matter; eletrodynamics; conservation laws.	UG	LE	Lecture
Spring 2008	PHY452	452	Electricity and Magnetism	PHY	Physics	3	Fundamental laws of electricity and magnetism from viewpoint of fields. Electromagentic waves; time-dependent potentials and fields; radiation; resonant cavities; waveguides and transmission lines.	UG	LE	Lecture
Spring 2008	PHY460	460	Intro to Quantum Mechanics	PHY	Physics	4	Mathematical structure of quantum mechanics. Applications to selected one- and three-dimensional problems with emphasis on atomic structure.	UG	LE	Lecture

Spring 2008	PHY461	461	Intro to Solid State Physics	PHY	Physics	4	Selected properties of solids and their quantitative explanation in terms of simple physical models. Applications of quantum mechanics to solids. Three hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	PHY462	462	Nuclear & Particle Physics	PHY	Physics	4	Nuclear properties and models, radioactive decay, nuclear applications, elementary particle properties and interactions, the standard model.	UG	LE	Lecture
Spring 2008	PHY470	470	Selected Topics	PHY	Physics	1	Selected topics in physics.	UG	IS	Independent Study
Spring 2008	PHY480	480	Intro to Theoretical Physics	PHY	Physics	4	Introduction to classical theoretical physics. Emphasis on mechanics and mathematical techniques.	UG	LE	Lecture
Spring 2008	PHY481	481	Intro to Theoretical Physics	PHY	Physics	3	Continuation of PHY 480. Emphasis on electromagnetic field theory and mathematical techniques.	UG	LE	Lecture
Spring 2008	PHY482	482	Intro to Theoretical Physics	PHY	Physics	3	Continuation of PHY 481. Emphasis on electromagnetic field theory and mathematical techniques.	UG	LE	Lecture
Spring 2008	PHY488	488	Independent Reading	PHY	Physics	1		UG	IS	Independent Study
Spring 2008	PHY494	494	Senior Projects	PHY	Physics	3	Selected problems in experimental and theoretical physics with critical analysis of results.	UG	IS	Independent Study
Spring 2008	PHY494W	494W	Writing in PHY 494	PHY	Physics	0	Required writing compnent for PHY 494.	UG	LB	Lab

Spring 2008	PHY499	499	Special Hon Research Problems	PHY	Physics	3	Special research in a recognized branch of physics, usually related to research carried on by the department. Critical analysis of results required.	UG	IS	Independent Study
Spring 2008	PHY499W	499W	Writing in PHY 499	PHY	Physics	0	Required writing component for PHY 499.	UG	LB	Lab
Spring 2008	PHY599	599	Spec Problem in Physics	PHY	Physics	1	Special topics, problems or research designed for specific needs and talents of the student.	GR	IS	Independent Study
Spring 2008	PHY600	600	Intro-Semiconductor Materials	PHY	Physics	3	Study of crystal structure; selected topics in quantum theory; electron band structure; charge carriers in semiconductors; generation, recombination, and motion of charge carriers; electrical and optical properties; and structure and characteristics of p-n junctions.	GR	LE	Lecture
Spring 2008	PHY601	601	Semiconductor Device Physics	PHY	Physics	3	Covers the structure and characteristics of bipolar transistors, field effect transistors, and other selected devices. Design and computer modeling of devices.	GR	LE	Lecture
Spring 2008	PHY602	602	Semiconductor Device Processin	PHY	Physics	3	Survey of the individual processes used in fabricating semiconductor devices. Integration of these processes to produce MOS and bipolar structures. Computer design aids.	GR	LE	Lecture

Spring 2008	PHY610	610	Laboratory Arts & Techniques	PHY	Physics	2	Introduction to hand and machine tools in the fabrication of laboratory equipment. Emphasis is on a "hands-on" approach. Practical experiences are given in vacuum and soldering technology involving commonly utilized materials.	GR	LL	Lecture/Lab Combination
Spring 2008	PHY615	615	Physics Instrumentation I	PHY	Physics	3	Physics laboratory experiments with an emphasis on electrical measurements and electronic instruments. Lectures on circuit theory, experiment design, and electronic instruments. 1.5 hours lecture, 3 hours lab.	GR	LE	Lecture
Spring 2008	PHY615L	615L	Physics Instrumentation Lab I	PHY	Physics	0	Required laboratory for PHY 615.	GR	LB	Lab
Spring 2008	PHY616	616	Physics Instrumentation II	PHY	Physics	3	Experiments emphasizing electronic instruments applied to areas such as mechanics, atomic physics, and nuclear physics. Lectures on applications of integrated circuits to experimentation, data analysis, and data presentation. 1.5 hours lecture, 3 hours lab.	GR	LE	Lecture
Spring 2008	PHY616L	616L	Physics Instrumentation II Lab	PHY	Physics	0	Required laboratory for PHY 616.	GR	LB	Lab
Spring 2008	PHY620	620	Thermodynamics	PHY	Physics	3	Covers the first and second laws of thermodynamics: general thermodynamic formulas with applications to matter.	GR	LE	Lecture

Spring 2008	PHY621	621	Statistical Thermodynamics	PHY	Physics	3	Covers the kinetic theory of gases. Maxwell-Boltzmann statistics, and an introduction to quantum statistics.	GR	LE	Lecture
Spring 2008	PHY622	622	Applied Optics	PHY	Physics	4	Study of optical instruments by means of both geometric and physical optics. Theory and applications of interferometry and light detection devices. Brief introduction to lasers and holography. 4 hours lab for five weeks, 3 hours lecture.	GR	LE	Lecture
Spring 2008	PHY622L	622L	Applied optics Laboratory	PHY	Physics	0	Required laboratory for PHY 622.	GR	LB	Lab
Spring 2008	PHY632	632	Lasers	PHY	Physics	3	Introduction to the physics of lasers including emission and absorption processes in lasing, the factors controlling laser gain, the properties of optical resonators, and a survey of salient features for principal types of lasers.	GR	LL	Lecture/Lab Combination
Spring 2008	PHY640	640	Nanoegr and Nanosci	PHY	Physics	4	Introduction to nanoengineering, nanoscience and nanotechnology. Topics include introduction to quantum mechanics, fabrication, characterization, materials, electronic properties, optical properties, magnetic properties, devices, MEMS, NEMS.	GR	LE	Lecture

Spring 2008	PHY642	642	Physical Optics	PHY	Physics	4	Interaction of light and matter and the interpretation of these phenomena using the electromagnetic wave theory of radiation. Topics include emission, coherence, and holography, interference, diffraction, absorption, scattering, and polarization.	GR	LE	Lecture
Spring 2008	PHY645	645	Integrating Phy Sci & Math I	PHY	Physics	4	Integration of physics and mathematics, fulfilling science and math standards, physics education issues, inquiry teaching practices, and assessment will be addressed in the context of science and math process skills, measurement, and properties of matter.	GR	LE	Lecture
Spring 2008	PHY646	646	Integrating Phy Sci & Math II	PHY	Physics	4	Integration of physics and mathematics, science and math standards, physics education issues, inquiry teaching, assessment and technology will be addressed in the context of kinematics, forces and energy transfers.	GR	LE	Lecture
Spring 2008	PHY647	647	Integrating Phy Sci & Math III	PHY	Physics	4	Integration of physics and mathematics, science and math standards, physics education issues, inquiry teaching, assessment, technology will be addressed in the context of electricity, magnetism, waves, optics.	GR	LE	Lecture

Spring 2008	PHY650	650	Electricity and Magnetism	PHY	Physics	3	Fundamental laws of electricity and magnetism presented from the viewpoint of field theory. Maxwell's equations, transient and steady state currents, electric and magnetic properties of matter, and electromagnetic radiation.	GR	LE	Lecture
Spring 2008	PHY651	651	Electricity and Magnetism	PHY	Physics	3	Fundamental laws of electricity and magnetism presented from the viewpoint of field theory. Maxwell's equations, transient and steady state currents, electric and magnetic properties of matter, and electromagnetic radiation.	GR	LE	Lecture
Spring 2008	PHY652	652	Electricity and Magnetism	PHY	Physics	3	Fundamental laws of electricity and magnetism presented from the viewpoint of field theory. Maxwell's equations, transient and steady state currents, electric and magnetic properties of matter, and electromagnetic radiation.	GR	LE	Lecture
Spring 2008	PHY660	660	Intro to Quantum Mechanics	PHY	Physics	4	Mathematical structure of quantum mechanics. Applications to selected one- and three-dimensional problems with emphasis on atomic structure.	GR	LE	Lecture

Spring 2008	PHY661	661	Intro to Solid State Physics	PHY	Physics	4	Selected properties of solids and their quantitative explanation in terms of simple physical models. Applications of quantum mechanics to solids. 3 hours lecture, 2 hours lab	GR	LL	Lecture/Lab Combination
Spring 2008	PHY662	662	Intr-Nuclear Phys & Relativity	PHY	Physics	4	Special theory of relativity. Nuclear radiation, nuclear properties, nuclear transformations, and elementary particles and interactions.	GR	LE	Lecture
Spring 2008	PHY671	671	Analytical Mechanics I	PHY	Physics	3	Intermediate problems in statics, kinematics, and dynamics; the study of equilibrium of forces, rectilinear motion, curvilinear motion, central forces, constrained motion, energy and moments of inertia; and the Lagrange method.	GR	LE	Lecture
Spring 2008	PHY672	672	Analytical Mechanics II	PHY	Physics	3	Intermediate problems in statics, kinematics, and dynamics; the study of equilibrium of forces, rectilinear motion, curvilinear motion, central forces, constrained motion, energy and moments of inertia; and the Lagrange method.	GR	LE	Lecture
Spring 2008	PHY673	673	Mathematical Physics	PHY	Physics	3	Survey of the field of mathematical physics including vector analysis, analytical mechanics, electromagnetism, and thermodynamics.	GR	LE	Lecture

Spring 2008	PHY674	674	Mathematical Physics	PHY	Physics	3	Survey of the field of mathematical physics including vector analysis, analytical mechanics, electromagnetism, and thermodynamics.	GR	LE	Lecture
Spring 2008	PHY675	675	Mathematical Physics	PHY	Physics	3	Survey of the field of mathematical physics including vector analysis, analytical mechanics, electromagnetism, and thermodynamics.	GR	LE	Lecture
Spring 2008	PHY680	680	Intro to Theoretical Physics	PHY	Physics	4	Classical theoretical physics with emphasis on mechanics, electromagnetic field theory, and mathematical techniques.	GR	LE	Lecture
Spring 2008	PHY681	681	Intro to Theoretical Physics	PHY	Physics	3	Classical theoretical physics with emphasis on mechanics, electromagnetic field theory, and mathematical techniques.	GR	LE	Lecture
Spring 2008	PHY682	682	Intro-Theoretical Physics	PHY	Physics	3	Classical theoretical physics with emphasis on mechanics, electromagnetic field theory, and mathematical techniques.	GR	LE	Lecture
Spring 2008	PHY699	699	Phy Sci Teach	PHY	Physics	1	Physical science topics for teachers. Topics vary by year. Applicable to grades 3-12 teachers.	GR	LL	Lecture/Lab Combination
Spring 2008	PHY700	700	Principles of Instruction-Phys	PHY	Physics	3	Survey of available instructional materials and discussion of educational theory and techniques leading to more effective instruction. For physics majors only or departmental approval required.	GR	LE	Lecture

Spring 2008	PHY704	704	Philosophy of Physics	PHY	Physics	2	The various areas of physics are studied with regard to their historical and philosophical basis in modern physical theory. Consent of the department required.	GR	LE	Lecture
Spring 2008	PHY705	705	Philosophy of Physics	PHY	Physics	2	The various areas of physics are studied with regard to their historical and philosophical basis in modern physical theory. Consent of the department required.	GR	LE	Lecture
Spring 2008	PHY706	706	Philosophy of Physics	PHY	Physics	2	The various areas of physics are studied with regard to their historical and philosophical basis in modern physical theory. Consent of the department required.	GR	LE	Lecture
Spring 2008	PHY710	710	Quantum Mechanics	PHY	Physics	3	Introduction to nonrelativistic quantum mechanics. Schroedinger's equation. Matrix mechanics. Applications to simple atomic and nuclear systems.	GR	LE	Lecture
Spring 2008	PHY711	711	Quantum Mechanics	PHY	Physics	3	Introduction to nonrelativistic quantum mechanics. Schroedinger's equation. Matrix mechanics. Applications to simple atomic and nuclear systems.	GR	LE	Lecture
Spring 2008	PHY712	712	Quantum Mechanics	PHY	Physics	3	Introduction to nonrelativistic quantum mechanics. Schroedinger's equation. Matrix mechanics. Applications to simple atomic and nuclear systems.	GR	LE	Lecture

Spring 2008	PHY720	720	Statistical Physics	PHY	Physics	4	Laws of thermodynamics and the development of statistical mechanics. Macroscopic and microscopic applications to physical systems. Classical and quantum statistics. Fluctuation phenomena.	GR	LE	Lecture
Spring 2008	PHY728	728	General Relativity	PHY	Physics	2	Principles of the general theory of relativity with applications to gravitation and cosmology. Review of special relativity and tensor analysis. The equivalence principle, curvature, and Einstein s field equations.	GR	LE	Lecture
Spring 2008	PHY729	729	General Relativity	PHY	Physics	2	Continuation of PHY 728. Applications of general relativity. Gravitational radiation and gravitational collapse.	GR	LE	Lecture
Spring 2008	PHY730	730	Solid State Physics	PHY	Physics	3	Introduction to the physics of solids. Lattice dynamics; thermal, electrical, and mechanical properties. Free electron and band theories of solids.	GR	LE	Lecture
Spring 2008	PHY731	731	Solid State Physics	PHY	Physics	3	Introduction to the physics of solids. Lattice dynamics; thermal, electrical, and mechanical properties. Free electron and band theories of solids.	GR	LE	Lecture
Spring 2008	PHY732	732	Solid State Physics	PHY	Physics	3	Introduction to the physics of solids. Lattice dynamics; thermal, electrical, and mechanical properties. Free electron and band theories of solids.	GR	LE	Lecture

Spring 2008	PHY740	740	Nuclear Physics	PHY	Physics	3	Introductory methods in nuclear physics. Elementary concepts and simple considerations about nuclear forces, alpha and beta decay, nuclear structure. Phenomenological treatment of nuclear reactions and decay processes.	GR	LE	Lecture
Spring 2008	PHY741	741	Nuclear Physics	PHY	Physics	3	Introductory methods in nuclear physics. Elementary concepts and simple considerations about nuclear forces, alpha and beta decay, nuclear structure. Phenomenological treatment of nuclear reactions and decay processes.	GR	LE	Lecture
Spring 2008	PHY742	742	Nuclear Physics	PHY	Physics	3	Introductory methods in nuclear physics. Elementary concepts and simple considerations about nuclear forces, alpha and beta decay, nuclear structure. Phenomenological treatment of nuclear reactions and decay processes.	GR	LE	Lecture
Spring 2008	PHY751	751	Atomic Spectra & Structure	PHY	Physics	4	Modern theory of the atom and quantum mechanical treatment of the origin of atomic and X-ray spectra.	GR	LE	Lecture
Spring 2008	PHY752	752	Molecular Spectra & Structure	PHY	Physics	4	Theory of molecular spectra and structure with examination of experimental data as related to molecular spectra.	GR	LE	Lecture
Spring 2008	PHY770	770	Selected Topics	PHY	Physics	3	Topics vary.	GR	IS	Independent Study

Spring 2008	PHY780	780	Plasma Physics	PHY	Physics	3	Introduction to plasma physics. Motion of charged particles in electric and magnetic fields. Magneto-ionic theory, continuum equations, the Vlasov equation, the Boltzmann equation, and the BBGKY equations.	GR	LE	Lecture
Spring 2008	PHY781	781	Plasma Physics	PHY	Physics	3	Introduction to plasma physics. Motion of charged particles in electric and magnetic fields. Magneto-ionic theory, continuum equations, the Vlasov equation, the Boltzmann equation, and the BBGKY equations.	GR	LE	Lecture
Spring 2008	PHY782	782	Plasma Physics	PHY	Physics	3	Introduction to plasma physics. Motion of charged particles in electric and magnetic fields. Magneto-ionic theory, continuum equations, the Vlasov equation, the Boltzmann equation, and the BBGKY equations.	GR	LE	Lecture
Spring 2008	PHY789	789	Continuing Registration	PHY	Physics	1		GR	IS	Independent Study
Spring 2008	PHY799	799	Minor problems	PHY	Physics	1	Students pursue topics on a tutorial basis. Cannot be used for thesis credit.	GR	IS	Independent Study
Spring 2008	PHY800	800	Seminar	PHY	Physics	1	Scheduled discussions of current problems in physics. Centered around student presentations.	GR	SE	Seminar

Spring 2008	PHY825	825	Fund of Bio Comp & Modeling	PHY	Physics	5	This course will treat fundamental programming approaches, data structures and mathematical/statistical principles used in designing, computational biology tools and algorithms. Students will learn theoretical principles and gain practical experience.	GR	LE	Lecture
Spring 2008	PHY899	899	Research	PHY	Physics	1	Gives students opportunities for study or laboratory work in a specialized field of interest. For thesis preparation. May be repeated.	GR	IS	Independent Study
Spring 2008	PLS200	200	Political Life	PLS	Political Science	4	Examination of political power relationships in contemporary society. Emphasizes the origins and forms of power and the key social structures exercising power with contemporary public issues. Provides case studies of the consequences of political relationships.	UG	LE	Lecture
Spring 2008	PLS200W	200W	Writing in PLS 200	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS210	210	Quantitative Methods Pol Sci	PLS	Political Science	4	Uses of quantitative political data with emphasis on contemporary research applications. Survey design and questionnaire construction. Analysis and interpretation of data.	UG	LE	Lecture

Spring 2008	PLS211	211	Empirical Political Analysis	PLS	Political Science	4	Scope and methods of empirical political research; concepts and hypotheses; explanation and prediction; and methodological approaches to the study of politics and political behavior.	UG	LE	Lecture
Spring 2008	PLS212	212	American National Government	PLS	Political Science	4	Introductory survey of American national government including study of political participation, interest groups, political parties, leadership, mass media, elections and campaigns, the Constitution, presidency, Congress, bureaucracy, and the courts.	UG	LE	Lecture
Spring 2008	PLS212W	212W	Writing in PLS 212	PLS	Political Science	0	Required writing component for PLS 212.	UG	LB	Lab
Spring 2008	PLS222	222	International Politics	PLS	Political Science	4	Introductory survey of the international political system including study of state and nonstate actors, major features of the system, conflict roots and approaches to peace-keeping, and current issues.	UG	LE	Lecture
Spring 2008	PLS222W	222W	Writing in PLS 222	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS301	301	Modern Political Ideologies	PLS	Political Science	4	Systematic analysis of the major political ideologies of the twentieth century with particular attention to democracy, fascism, communism, and nationalism.	UG	LE	Lecture
Spring 2008	PLS301W	301W	Writing in PLS 301	PLS	Political Science	0	Required writing component for PLS 301.	UG	LB	Lab

Spring 2008	PLS302	302	Comp Politics & Theory	PLS	Political Science	4	This course introduces the basic concepts and theories of comparative politics. The diversity of political systems is examined through analysis of organizations, participation and change. Historical and contemporary issues are examined.	UG	LE	Lecture
Spring 2008	PLS305	305	Comparative Marxist Theory	PLS	Political Science	4	Critical examination of the chief theories developed by Marx, Engels, Lenin, Stalin, Mao Tse-tung, Castro, and various revisionists. Emphasis on Soviet and Chinese ideologies.	UG	LE	Lecture
Spring 2008	PLS315	315	Religion & Politics in America	PLS	Political Science	4	(Also listed as REL 365) General examination of both the historical and the contemporary relation between religion and politics in the United States, with special reference to church/state separation.	UG	LE	Lecture
Spring 2008	PLS321	321	City Politics	PLS	Political Science	4	Also listed as URS 321.) Governments and politics of metropolitan regions; government structure and functions; and interest and power relations.	UG	LE	Lecture
Spring 2008	PLS322	322	State Government	PLS	Political Science	4	Survey and analysis of the structures and functions of the American states with special attention to the problems of federal-state and state-local relations, legislative apportionment, and urban growth.	UG	LE	Lecture

Spring 2008	PLS323	323	Government of Ohio	PLS	Political Science	4	Organization and functions of the government of Ohio with special attention to development, social structure, legal status, electoral processes, and fiscal problems.	UG	LE	Lecture
Spring 2008	PLS324	324	Political Aspects of Urban Dev	PLS	Political Science	4	Institutional and political context of planning: laws, governmental structures and procedures, and urban politics.	UG	LE	Lecture
Spring 2008	PLS325	325	African American Politics	PLS	Political Science	4	Explores what makes African American politics distinctive from American politics and discusses the prerequisites for effective political and economic leadership in the black community. A major theme of the course is the notion of black power.	UG	LE	Lecture
Spring 2008	PLS325W	325W	Writing in PLS 325	PLS	Political Science	0	Required writing component for PLS 325.	UG	LB	Lab
Spring 2008	PLS331	331	Political Parties	PLS	Political Science	4	General functions, organization, and operation of American political parties. Emphasis on role of parties in democratic systems. Examines nominations, elections, campaigns, and presidential politics.	UG	LE	Lecture
Spring 2008	PLS331W	331W	Writing in PLS 331	PLS	Political Science	0		UG	LB	Lab

Spring 2008	PLS335	335	The American Presidency	PLS	Political Science	4	General political functions, roles, and structure of the presidential office; limits and opportunities of presidential power; relations with Congress, courts, bureaucracy, the public, and the political party; and presidential personality.	UG	LE	Lecture
Spring 2008	PLS335W	335W	Writing in PLS 335	PLS	Political Science	0	Required writing component for PLS 335.	UG	LB	Lab
Spring 2008	PLS337	337	The Legislative Process	PLS	Political Science	4	Policy role, political functions, internal structure, and operation of Congress. Secondary concern for state legislatures and non-American legislative bodies.	UG	LE	Lecture
Spring 2008	PLS337W	337W	Writing in PLS 337	PLS	Political Science	0	Required writing component for PLS 337.	UG	LB	Lab
Spring 2008	PLS340	340	Law and Society	PLS	Political Science	4	Theories of law; in addition to the nature and functions of the judicial process.	UG	LE	Lecture
Spring 2008	PLS341	341	Fund of Criminal Investigation	PLS	Political Science	4	Survey of investigative techniques focusing on specific problems and crimes to illustrate proper methods and procedures of criminal investigations.	UG	LE	Lecture
Spring 2008	PLS341W	341W	Writing in PLS 341	PLS	Political Science	0	Required writing component for PLS 341.	UG	LB	Lab
Spring 2008	PLS342	342	Civil Liberties I: 1st Amndmnt	PLS	Political Science	4	Cases and related materials on the Bill of Rights and the 14th Amendment with emphasis on the First Amendment freedoms: freedom of speech, of the press, and of religion.	UG	LE	Lecture

Spring 2008	PLS342W	342W	Writing in PLS 342	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS343	343	Civil Liberties II:Due Process	PLS	Political Science	4	Cases and related materials on the enforcement of civil rights and liberties through the due process and equal protection claims of the 14th Amendment.	UG	LE	Lecture
Spring 2008	PLS343W	343W	Writing in PLS 343	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS344	344	Police Procedures & Operations	PLS	Political Science	4	Procedures and operations of law enforcement at various levels from patrol to senior administration, emphasizing duties, responsibilities, and leadership.	UG	LE	Lecture
Spring 2008	PLS344W	344W	Writing in PLS 344	PLS	Political Science	0	Required writing component for PLS 344.	UG	LB	Lab
Spring 2008	PLS345	345	Public Administration	PLS	Political Science	4	Also listed as URS 345.) Nature and scope of public administration, administrative law, and public interest in the administrative process.	UG	LE	Lecture
Spring 2008	PLS346	346	Public Personnel Admin	PLS	Political Science	4	Methods of employment, training, compensation, and employee relations in various levels of civil service. Examines organizations of public employees.	UG	LE	Lecture

Spring 2008	PLS347	347	Amer Public Policy Analysis	PLS	Political Science	4	The nature and classification of public policy. Emphasis on fragmentation, incrementalism, and bargaining as a means of policy development. Impact of citizens on public policy. Survey of public policy goals and problems of public policy evaluation.	UG	LE	Lecture
Spring 2008	PLS351	351	Political Sys of West Europe	PLS	Political Science	4	Comparative study of the political systems of Great Britain, France, and West Germany.	UG	LE	Lecture
Spring 2008	PLS351W	351W	Writing in PLS 351	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS352W	352W	Writing in PLS 352	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS354	354	Governments of East Europe	PLS	Political Science	4	Introduction to the governments and politics of Eastern Europe, particularly since World War II. Includes current developments in Poland, Czechoslovakia, East Germany, Hungary, Rumania, Bulgaria, and Yugoslavia.	UG	LE	Lecture
Spring 2008	PLS356	356	Politics & Society in France	PLS	Political Science	4	Examines the historic interaction of French culture and politics. Topics include the growth of the French nation and state, French society, the nature of modern politics and institutions, and France's role in world affairs.	UG	LE	Lecture
Spring 2008	PLS358W	358W	Writing in PLS	PLS	Political Science	0		UG	LB	Lab

Spring 2008	PLS360	360	Politics of Developing Nations	PLS	Political Science	4	Comparative analysis of various problems, particularly political, confronting developing nations in nation building and development.	UG	LE	Lecture
Spring 2008	PLS360W	360W	Writing in PLS 360	PLS	Political Science	0	Required writing component for PLS 360.	UG	LB	Lab
Spring 2008	PLS368	368	Politics of Vietnam	PLS	Political Science	4	An examination of the history, demography, politics, culture, and economy of Vietnam.	UG	LE	Lecture
Spring 2008	PLS368W	368W	Writing in PLS 368	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS370	370	International Theory	PLS	Political Science	4	Study of recent findings in international politics. Explanations of world political developments such as war, alliance formation, and arms races.	UG	LE	Lecture
Spring 2008	PLS370W	370W	Writing in PLS 370	PLS	Political Science	0	Required writing component for PLS 370.	UG	LB	Lab
Spring 2008	PLS371	371	Current World Problems	PLS	Political Science	4	Various views and perspectives on selected contemporary problems and trends in inter-national politics.	UG	LE	Lecture
Spring 2008	PLS372	372	International Organization	PLS	Political Science	4	Analysis of developing structures and functions of the United Nations and other international organizations, and concepts relating to world government.	UG	LE	Lecture
Spring 2008	PLS372W	372W	Writing in PLS 372	PLS	Political Science	0	Required writing component for PLS 372.	UG	LB	Lab

Spring 2008	PLS375	375	Human Rights in USA	PLS	Political Science	4	Examines controversies over human rights in the United States and considers contending definitions of human rights and debates over policy by focusing on a range of issues including immigration, pornography, gay rights, race relations, and poverty.	UG	LE	Lecture
Spring 2008	PLS376	376	Peace Studies	PLS	Political Science	4	Study of war, peace, and current efforts in dealing with international conflict. Examines the roots of war in American society and alternative strategies for elimination of war as an instrument of policy.	UG	LE	Lecture
Spring 2008	PLS381	381	National Security Politics	PLS	Political Science	4	Study of U.S. national defense and security policy process and the major strategic issues facing the U.S. government.	UG	LE	Lecture
Spring 2008	PLS381W	381W	Writing in PLS 381	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS382	382	US-Japan Foreign Relations	PLS	Political Science	4	Examines the course of the relationship between the United States and Japan. Includes political, security, and economic issues.	UG	LE	Lecture
Spring 2008	PLS399	399	Studies in Selected Topics	PLS	Political Science	1	Problems, approaches, and topics in the field of political science. Topics vary.	UG	LE	Lecture
Spring 2008	PLS399W	399W	Writing in PLS 399	PLS	Political Science	0	Required writing component for PLS 399.	UG	LB	Lab

Spring 2008	PLS402	402	Classic & Medieval Pol Thought	PLS	Political Science	4	(Also listed as PHL 431.) Critical examination of political ideas from 500 B.C. to A.D. 1500 with special attention to Plato, Aristotle, Cicero, St. Augustine, St. Thomas Aquinas, Luther, Calvin, and Machiavelli.	UG	SE	Seminar
Spring 2008	PLS403	403	Political Thought: Hobbes-Mill	PLS	Political Science	4	(Also listed as PHL 432.) Critical examination of political ideas from 1600 to 1900 with special attention to Hobbes, Locke, Rousseau, Montesquieu, Hume, Burke, Hegel, Bentham, Marx, and Mill.	UG	LE	Lecture
Spring 2008	PLS404	404	20th Century Political Thought	PLS	Political Science	4	Critical examination of 20th-century political theory. Emphasis on nature, methodology, evaluation, existing condition, and future of political thought.	UG	LE	Lecture
Spring 2008	PLS406	406	Global Theories & Gender Pol	PLS	Political Science	4	An examination of globalization theories and the gender politics of global restructuring.	UG	LE	Lecture
Spring 2008	PLS406W	406W	Writing in PLS 406	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS407	407	Seminar in Political Theory	PLS	Political Science	4	Readings, research, reports, and discussion on selected theorists, topics, and problems. Topics vary.	UG	SE	Seminar
Spring 2008	PLS408	408	Radical Black Thought	PLS	Political Science	4	Examines radical black thought and philosophy from a Pan-Africanist perspective, focusing primarily on the 20th century.	UG	LE	Lecture

Spring 2008	PLS408W	408W	Writing in PLS 408	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS412	412	Topics-Empirical Pol Analysis	PLS	Political Science	4	Selected topics of methodological or analytical concern in contemporary political research.	UG	LE	Lecture
Spring 2008	PLS420	420	Politics and the Novel	PLS	Political Science	4	(Also listed as ENG 460) Study and critiques of political themes in works of selected 20th century authors, including social roles, activism, political awareness, power, government and conflict at the individual, institutional and international level.	UG	LE	Lecture
Spring 2008	PLS427	427	Urban Policy Analysis	PLS	Political Science	4	(Also listed as URS 427.) Study of selected urban problems and their relationship to the political environment. Use of simulation gaming to understand community development processes.	UG	LE	Lecture
Spring 2008	PLS428	428	Contemp Afr-Amer Problems	PLS	Political Science	4	The critical pedagogy of this course allows for an in-depth exploration of many problematic issues that assail African Americans from outside and within the black community itself. Several possible explanations and solutions will be addressed.	UG	LE	Lecture
Spring 2008	PLS428W	428W	Writing in PLS 428	PLS	Political Science	0		UG	LB	Lab

Spring 2008	PLS430	430	American Government Seminar	PLS	Political Science	4	Selected topics related to American political institutions and processes. Emphasis on readings, discussion, and research. Topics vary.	UG	SE	Seminar
Spring 2008	PLS430W	430W	Writing in PLS 430	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS431	431	Cyber Crime	PLS	Political Science	4	Investigation of political and legal issues in computer and Internet based crime, including child pornography, computer fraud, and identity theft, prevention of cyber crime and responsibilities of computer owners and Internet servers.	UG	LE	Lecture
Spring 2008	PLS431W	431W	Writing in PLS 431	PLS	Political Science	0	Required writing component for PLS 431.	UG	LB	Lab
Spring 2008	PLS433	433	Public Opinion	PLS	Political Science	4	Opinion formation in American politics; relationship of opinion to public policy; voting behavior in American elections; role of mass media and political interest groups in policy process; and development of political attitudes and values.	UG	LE	Lecture
Spring 2008	PLS434	434	Political Leadership	PLS	Political Science	4	Development of political attitudes and values among leaders, activists, and the public. Relationship between personality, political leadership, behavior, and policy.	UG	LE	Lecture
Spring 2008	PLS434W	434W	Writing in PLS 434	PLS	Political Science	0		UG	LB	Lab

Spring 2008	PLS435	435	Seminar - Political Corruption	PLS	Political Science	4	Analysis of political corruption including campaign and elections, graft, the executive branch, congressional ethics, corruption in law enforcement, organized crime and abuse of authority.	UG	SE	Seminar
Spring 2008	PLS435W	435W	Writing in PLS 435	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS436	436	Criminal Law	PLS	Political Science	4	Examines the nature of the criminal law and reviews the law pertaining to criminal liability; inchoate crimes; the elements of crimes against persons, property, and habitation; and the defenses to criminal actions.	UG	LE	Lecture
Spring 2008	PLS436W	436W	Writing in PLS 436	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS437	437	Criminal Procedure	PLS	Political Science	4	Examines the constitutional protections that the individual has when confronting the criminal justice system. Examines case law pertaining to the surrounding the Fourth Amendment (search and seizure), Fifth Amendment (self-incrimination), and Sixth Amendment (right to counsel).	UG	LE	Lecture
Spring 2008	PLS437W	437W	Writing in PLS 437	PLS	Political Science	0	Required writing component for PLS 437.	UG	LB	Lab

Spring 2008	PLS438	438	Environmental Law & Policy	PLS	Political Science	4	Examines environmental law and policy and reviews the statutory framework pertaining to environmental impact statements, the regulation of air and water pollution, the disposal and cleanup of toxic wastes, and workplace safety.	UG	LE	Lecture
Spring 2008	PLS439	439	Bioethics and Law	PLS	Political Science	4	New biological technologies are emerging that increase our control over human behavior. Course examines legal implications of new biological technologies, particularly mind and behavior control, genetic engineering, birth and death control, and organ transplantation.	UG	LE	Lecture
Spring 2008	PLS440	440	Constitutional Law	PLS	Political Science	4	Cases in which provisions of the constitution have been judicially interpreted. Also examines federal systems, separation of powers, and limits on government.	UG	LE	Lecture
Spring 2008	PLS440W	440W	Writing in PLS 440	PLS	Political Science	0	Required writing component for PLS 440.	UG	LB	Lab
Spring 2008	PLS441	441	Natural Resources Law	PLS	Political Science	4	This course examines federal management of natural resources on public lands, specifically, water, minerals, timber, grazing, and wildlife. Constitutional authority, statutes, regulations, federalism, and judicial review of administrative decisions are analyzed.	UG	LE	Lecture

Spring 2008	PLS442	442	Criminal Justice System	PLS	Political Science	4	Survey of the American criminal justice system concentrating on political aspects. Topics include police, judges, attorneys, supreme court decisions, crime, and public opinion.	UG	LE	Lecture
Spring 2008	PLS442W	442W	Writing in PLS 442	PLS	Political Science	0	Required writing component for PLS 442.	UG	LB	Lab
Spring 2008	PLS443	443	Administrative Law Procedures	PLS	Political Science	4	Study of the law controlling the process by which public agencies make and administer policy. Topics include policy formulation and budgeting, legislative delegation, administrative agencies, rule making, and adjudication.	UG	LE	Lecture
Spring 2008	PLS443W	443W	Writing in PLS 443	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS444	444	Topics in Criminal Justice	PLS	Political Science	4	Problems, approaches, and topics in the field of criminal justice. Topics vary.	UG	LE	Lecture
Spring 2008	PLS444W	444W	Writing in PLS 444	PLS	Political Science	0	Required writing component for PLS 444.	UG	LB	Lab
Spring 2008	PLS445	445	Adv Criminal Investigation	PLS	Political Science	4	Criminal investigative techniques including forensics, evidence, interviews, and interrogation as applied to specific types of crimes.	UG	LE	Lecture
Spring 2008	PLS445W	445W	Writing in PLS 445	PLS	Political Science	0		UG	LB	Lab

Spring 2008	PLS446	446	Public Budgeting	PLS	Political Science	4	(Also listed as URS 446.) Exanmination of the major phases of the governmental budget cycle; types of budget; budgetary reform; economic and public policy impact of government budgeting; decision-making process; and legislative/executive relations in budget formation and implementation.	UG	LE	Lecture
Spring 2008	PLS447	447	Sem Public Admin	PLS	Political Science	4	Selected national, state, and local problems with emphasis on legal scope of administrative power and on research methods used by staff agencies. Topics vary.	UG	SE	Seminar
Spring 2008	PLS448	448	Gender Violence & Amr Politics	PLS	Political Science	4	Examines gender violence in the United States. Considers the range of violence, its sources, and solutions. Topics include domestic violence, rape, eating disorders, reproductive rights, and pornography.	UG	LE	Lecture
Spring 2008	PLS448W	448W	Writing in PLS	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS449	449	Intl Pol of Gender Violence	PLS	Political Science	4	Cross-cultural examination of gender violence. Considers the range of violence, its sources, and solutions. Topics include domestic abuse, rape, female genital surgeries, prostitution, and reproductive rights.	UG	LE	Lecture
Spring 2008	PLS449W	449W	Writing in PLS 449	PLS	Political Science	0		UG	LB	Lab

Spring 2008	PLS451	451	Contemp African Politics	PLS	Political Science	4	Political processes and governmental institutions of sub-Saharan Africa; special attention to dynamics of political development and social and economic change. Comparative analysis of selected African political systems.	UG	LE	Lecture
Spring 2008	PLS451W	451W	Writing in PLS 451	PLS	Political Science	0	Required writing component for PLS 451.	UG	LB	Lab
Spring 2008	PLS452	452	Intl Human Rights	PLS	Political Science	4	Examines the role of human rights in international relations and considers contending definitions of human rights and debates over policy by focusing on case studies including South Africa, China, Guatemala and Bosnia.	UG	LE	Lecture
Spring 2008	PLS452W	452W	Writing in PLS 452	PLS	Political Science	0	Required writing component for PLS 452.	UG	LB	Lab
Spring 2008	PLS453	453	Soviet Successor States	PLS	Political Science	4	Examines the political life in the former Soviet Union, with emphasis on the legacy of communism and the role of economics and politics in the transition to democracy.	UG	LE	Lecture
Spring 2008	PLS453W	453W	Writing in PLS 453	PLS	Political Science	0	Required writing component for PLS 453.	UG	LB	Lab
Spring 2008	PLS454	454	Politics of the Middle East	PLS	Political Science	4	Introduction to governments and politics of the Middle East with special attention to cultural and historical background and the Arab-Israeli conflict.	UG	LE	Lecture
Spring 2008	PLS454W	454W	Writing in PLS 454	PLS	Political Science	0	Required writing component for PLS 454.	UG	LB	Lab

Spring 2008	PLS455	455	Israeli & Palestinian Politics	PLS	Political Science	4	A seminar covering the development and current status of Israeli and Palestinian politics, with emphasis on the Palestinian-Israeli conflict, and the government and politics of Israel and the Palestinian authority.	UG	LE	Lecture
Spring 2008	PLS455W	455W	Writing in PLS 455	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS456	456	Canadian Government & Politics	PLS	Political Science	4	This course examines Canadian government and politics, including political values and culture, as well as institutions and processes. The Canada-US relationship, and similarities and differences between the two systems will be examined.	UG	LE	Lecture
Spring 2008	PLS456W	456W	Writing in PLS 456	PLS	Political Science	0	Required writing component for PLS 456.	UG	LB	Lab
Spring 2008	PLS457	457	Scandinavian Govt & Politics	PLS	Political Science	4	An examination of the theory and practice of Scandinavian government and politics. Consideration of both the political values and culture of the region as well as its prime political institutions and processes.	UG	SE	Seminar
Spring 2008	PLS457W	457W	Writing in PLS 457	PLS	Political Science	0		UG	LB	Lab

Spring 2008	PLS458	458	Latin American Politics	PLS	Political Science	4	Selected issues in the study of Latin American politics with an emphasis on the nature of the state and the role of institutions such as the military and unions in politics. Examples from major South American states and Mexico where appropriate.	UG	LE	Lecture
Spring 2008	PLS458W	458W	Writing in PLS 458	PLS	Political Science	4		UG	LB	Lab
Spring 2008	PLS459	459	Contemporary Brazil	PLS	Political Science	4	Introduction to Brazilian politics, society and economy. Topics include Brazil's political and economic liberalization, its international relations, gender and race relations, and the environment.	UG	LE	Lecture
Spring 2008	PLS459W	459W	Writing in PLS 459	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS460	460	Sem Comp Pol Systems	PLS	Political Science	4	Readings, research, reports, and discussion of selected topics and problems. Topics vary.	UG	SE	Seminar
Spring 2008	PLS460W	460W	Writing in PLS 460	PLS	Political Science	0	Required writing component for PLS 460.	UG	LB	Lab
Spring 2008	PLS461	461	Social Movements & Protests	PLS	Political Science	4	Examines group behavior motivated by the desire to change political, economic, and social systems. Special attention will be given to movements outside of the United States, including cross-national and global movements.	UG	LE	Lecture
Spring 2008	PLS461W	461W	Writing in PLS 461	PLS	Political Science	0		UG	LB	Lab

Spring 2008	PLS462	462	Comparative Revolutions	PLS	Political Science	4	Surveys theoretical literature on revolutions: what they are, how and why they occur. Explores different approaches to the topic and some of the current debates in the literature. Applies theory to actual historical cases.	UG	LE	Lecture
Spring 2008	PLS465	465	Politics of Nationalism	PLS	Political Science	4	Comparison of ethnic identity and politics in Western societies including the United States, Canda, Great Britain, and France. Topics include minorities and the welfare state, affirmative discrimination, and African American politics in the United States.	UG	LE	Lecture
Spring 2008	PLS465W	465W	Writing in PLS 465	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS466	466	Politics of South Asia	PLS	Political Science	4	This course examines the role played by South Asia in shaping the political, economic and security landscapes around the world. Focus will be on four countries in the region: India, Pakistan, Bangladesh and Nepal.	UG	LE	Lecture
Spring 2008	PLS467	467	Political Systems of China	PLS	Political Science	4	Analysis of political structures and processes of Communist China; focus on dynamic factors of socioeconomic and political development.	UG	LE	Lecture
Spring 2008	PLS467W	467W	Writing in PLS 467	PLS	Political Science	0		UG	LB	Lab

Spring 2008	PLS470	470	Seminar in Intrntnl Relations	PLS	Political Science	4	Readings, research, reports, and discussion of selected topics and problems.	UG	SE	Seminar
Spring 2008	PLS470W	470W	Writing in PLS 470	PLS	Political Science	0	Required writing component for PLS 470.	UG	LB	Lab
Spring 2008	PLS471	471	International Law	PLS	Political Science	4	Study of rules governing the conduct of international politics with emphasis on their relevance to current world problems.	UG	LE	Lecture
Spring 2008	PLS472	472	International Terrorism	PLS	Political Science	4	Surveys the phenomenon of terrorism: who employs it, how and why it occurs in international politics, and how targets respond to terrorism. The special problems terrorism creates for democracies and the politics of hostage-taking are examined. Prerequisite: PLS 222.	UG	SE	Seminar
Spring 2008	PLS472W	472W	Writing in PLS 472	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS473	473	American Foreign Policy	PLS	Political Science	4	Role of the United States in contemporary international politics and the relationship of the domestic political system to that role. Discussion of current problems.	UG	LE	Lecture
Spring 2008	PLS473W	473W	Writing in PLS 473	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS474	474	Politics of Women Terrorists	PLS	Political Science	4	Examines the political behavior of women in crime and terrorism, including the roles played by women in criminal activities and terrorist groups. Prerequisite: PLS 222.	UG	SE	Seminar

Spring 2008	PLS474W	474W	Writing in PLS 474	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS475	475	Women, Gender & World Politics	PLS	Political Science	4	An examination of the position of women and the power of gender in world politics through feminist international relations theory and case studies of women in international politics.	UG	LE	Lecture
Spring 2008	PLS475W	475W	Writing in PLS 475	PLS	Political Science	0	Required writing component for PLS 475.	UG	LB	Lab
Spring 2008	PLS482	482	Legislative Internship	PLS	Political Science	4	Experiential internship in the office of a state legislator, including office work, constituent assistance, and research. Sophomore standing and permission of instructor required.	UG	IN	Internship
Spring 2008	PLS482W	482W	Writing in PLS 482	PLS	Political Science	0	Required writing component for PLS 482.	UG	LB	Lab
Spring 2008	PLS484	484	Pre-Law Internship	PLS	Political Science	4	Students volunteer 15 hours per week in Greene County Prosecutor s office. Duties include preparing trial notebooks, legal research, courtroom observation, outreach, and other assistance to the prosecutor's staff.	UG	IN	Internship
Spring 2008	PLS484W	484W	Writing in PLS 484	PLS	Political Science	0	Required writing component for PLS 484.	UG	LB	Lab

Spring 2008	PLS485	485	Chinese Foreign Policy	PLS	Political Science	4	Examines foreign policy perspectives of modern Chinese leaders, including historical, political, economical and ideological priorities. Special attention will be given to China-U.S. relations, as well as China's role in international and regional organizations.	UG	LE	Lecture
Spring 2008	PLS485W	485W	Writing in PLS 485	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS486	486	Model UN Seminar	PLS	Political Science	4	Model U.N. is an experiential learning opportunity built around this seminar, with intensive training in research, public speaking, bargaining, and conflict resolution. Culminates at the national collegiate conference in New York, simulating the United Nations.	UG	SE	Seminar
Spring 2008	PLS486W	486W	Writing in PLS 486	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS487	487	Hst & Pol of Intel Gathering	PLS	Political Science	4	This course examines the history of intelligence gathering, analysis and application in policy-making in the United States. The tension inherent in a secret agency operating within a democratic state and the role of technology are addressed.	UG	LE	Lecture
Spring 2008	PLS487W	487W	Writing in PLS 487	PLS	Political Science	0	Required writing component for PLS 487.	UG	LB	Lab
Spring 2008	PLS490	490	Independent Reading	PLS	Political Science	1	Supervised individual readings on selected topics. Arranged between students and faculty member directing the study.	UG	IS	Independent Study

Spring 2008	PLS490W	490W	Writing in PLS 490	PLS	Political Science	0	Required writing component for PLS 490.	UG	LB	Lab
Spring 2008	PLS491	491	Independent Research	PLS	Political Science	1	Supervised individual research on selected topics. Arranged between students and faculty member directing the study.	UG	IS	Independent Study
Spring 2008	PLS491W	491W	Writing in PLS 491	PLS	Political Science	0	Required writing component for PLS 491.	UG	LB	Lab
Spring 2008	PLS492	492	Independent Field Research	PLS	Political Science	1	Supervised individual projects. May involve intern programs in local government or other special programs.	UG	IS	Independent Study
Spring 2008	PLS492W	492W	Writing in PLS 492	PLS	Political Science	0	Required writing component for PLS 492.	UG	LB	Lab
Spring 2008	PLS493	493	Contemporary Problems	PLS	Political Science	1	Advanced study in selected topics that frequently include new developments in the methodology or subject matter of the various sub fields of the discipline.	UG	SE	Seminar
Spring 2008	PLS493W	493W	Writing in PLS 493	PLS	Political Science	0		UG	LB	Lab
Spring 2008	PLS494	494	Special Topics	PLS	Political Science	1	Study of particular political problems of contemporary significance.	UG	SE	Seminar
Spring 2008	PLS505	505	Comparative Marxist Theory	PLS	Political Science	4	Critical examination of the chief theories developed by Marx, Engels, Lenin, Stalin, Mao Tse-tung, Castro, and various revisionists. Emphasis on Soviet and Chinese ideologies.	GR	SE	Seminar
Spring 2008	PLS523	523	Government of Ohio	PLS	Political Science	4		GR	LE	Lecture
Spring 2008	PLS524	524	Political Aspects-Urban Dvlmt	PLS	Political Science	4	Institutional and political context of planning: laws, governmental structures and procedures, and urban politics.	GR	LE	Lecture

Spring 2008	PLS525	525	African American Politics	PLS	Political Science	4	Explores what makes African American politics distinctive from American politics and the prerequisites for effective political and economic leadership in the black community. The notion of black power is a major course theme.	GR	LE	Lecture
Spring 2008	PLS539	539	United States Health Policy	PLS	Political Science	4	Critical review of important political, social, and economic causes and consequences of health policies in the United States.	GR	LE	Lecture
Spring 2008	PLS540	540	Law and Society	PLS	Political Science	4	Theories of law and the nature and functions of the judicial process.	GR	LE	Lecture
Spring 2008	PLS541	541	Fndmtls of Crime Investigation	PLS	Political Science	4	Survey of investigative techniques focusing on specific problems and crimes to illustrate proper methods and procedures of criminal investigations.	GR	LE	Lecture
Spring 2008	PLS542	542	Civil Liberties I:1st Ammndmnt	PLS	Political Science	4	Cases and related materials on the Bill of Rights and the 14th Amendment with emphasis on the First Amendment freedoms, concentrating on Supreme Court behavior and First Amendment procedures.	GR	LE	Lecture

Spring 2008	PLS543	543	Civil Liberties II	PLS	Political Science	4	Covers cases and related materials on the Bill of Rights and the Fourteenth Amendment. Emphasis on the First Amendment freedoms concentrating on enforcement of civil rights and liberties under the Bill of Rights and the Fourteenth Amendment.	GR	LE	Lecture
Spring 2008	PLS544	544	Police Procedures & Operations	PLS	Political Science	4	Procedures and operations of law enforcement at various levels from patrol to senior administration, emphasizing duties, responsibilities and leadership.	GR	LE	Lecture
Spring 2008	PLS546	546	Public Personnel Admnstrtn	PLS	Political Science	4	Examination of the major phases of the governmental budget cycle; types of budget; budgetary reform; economic and public policy impact of government budgeting; decision-making; and legislative-executive relations in budget formation and implementation.	GR	LE	Lecture
Spring 2008	PLS547	547	Amer Public Policy Analysis	PLS	Political Science	4	The nature and classification of public policy. Emphasis on fragmentation, incrementalism, and bargaining as a means of policy development. Impact of citizens on public policy. Survey of public policy goals and problems of public policy evaluation.	GR	LE	Lecture

Spring 2008	PLS551	551	Western European Politics	PLS	Political Science	4	Comparative study of the political systems of Great Britain, France, and West Germany.	GR	LE	Lecture
Spring 2008	PLS554	554	Governments of Eastern Europe	PLS	Political Science	4	Introduction to the governments and politics of Eastern Europe, particularly since World War II. Includes current developments in Poland, Czechoslovakia, East Germany, Hungary, Rumania, Bulgaria, and Yugoslavia.	GR	LE	Lecture
Spring 2008	PLS556	556	Politics & Society in France	PLS	Political Science	4	Examines the historic interaction of French culture and politics. Topics include the growth of the French nation and state, French society, the nature of modern politics and institutions, and France's role in world affairs.	GR	LE	Lecture
Spring 2008	PLS560	560	Politics of Developing Nations	PLS	Political Science	4	Comparative analysis of various problems, particularly political, confronting developing nations in nation building and development.	GR	LE	Lecture
Spring 2008	PLS562	562	Political System of Japan	PLS	Political Science	4	This course surveys Japanese government and politics, with emphasis on post-World War II and the American occupation. The government-guided economic recovery, Japanese political parties, and relations with Russia and China are also examined.	GR	LE	Lecture
Spring 2008	PLS568	568	Politics of Vietnam	PLS	Political Science	4	Examines the history, demography, politics, culture, and economy of Vietnam.	GR	LE	Lecture

Spring 2008	PLS568W	568W	Writing in PLS 568	PLS	Political Science	0		GR	LB	Lab
Spring 2008	PLS571	571	Current World Problems	PLS	Political Science	4	Various views and perspectives on selected contemporary problems and trends in international politics.	GR	LE	Lecture
Spring 2008	PLS572	572	International Organization	PLS	Political Science	4	Analysis of developing structures and functions of the United Nations and other international organizations, and concepts relating to world government.	GR	LE	Lecture
Spring 2008	PLS575	575	Human Rights in USA	PLS	Political Science	4	Examines controversies over human rights in the U.S. Considers contending definitions of human rights and debates over policy by focusing on a range of issues including immigration, pornography, gay rights, race relations, and poverty.	GR	LE	Lecture
Spring 2008	PLS576	576	Peace Studies	PLS	Political Science	4	Study of war, peace, and current efforts in dealing with international conflict. Examines the roots of war in American society and alternative strategies for elimination of war as an instrument of policy.	GR	LE	Lecture
Spring 2008	PLS581	581	National Security Politics	PLS	Political Science	4	Study of U.S. national defense and security policy process and the major strategic issues facing the U.S. government.	GR	LE	Lecture
Spring 2008	PLS582	582	US-Japan Foreign Relations	PLS	Political Science	4	Examines the course of the relationship between the U.S. and Japan. Includes political, security, and economic issues.	GR	LE	Lecture

Spring 2008	PLS599	599	Studies in Selected Subjects	PLS	Political Science	1	Problems, approaches, and topics in the field of political science. Topics vary.	GR	IS	Independent Study
Spring 2008	PLS602	602	Classic & Medieval Pol Thought	PLS	Political Science	4	Critical examination of political ideas from 500 B.C. to A.D. 1500 with emphasis on Plato, Aristotle, Cicero, St. Augustine, St. Thomas Aquinas, Luther, Calvin, and Machiavelli.	GR	LE	Lecture
Spring 2008	PLS603	603	Political Thought: Hobbes-Mill	PLS	Political Science	4	(Listed jointly with PHL 632.) Critical examination of political ideas from 1600 to 1900 with emphasis on Hobbes, Locke, Rousseau, Montesquieu, Hume, Burke, Hegel, Bentham, Marx, and Mill.	GR	LE	Lecture
Spring 2008	PLS604	604	20th Century Political Thought	PLS	Political Science	4	Critical examination of the ideas of twentieth-century political theorists. Emphasis on the nature, methodology, evaluation, existing condition, and future of political thought.	GR	LE	Lecture
Spring 2008	PLS606	606	Global Theories/Gender Pltcs	PLS	Political Science	4	Examines contending theories of the international political economy, including mercantilist, liberal, (neo) Marxist, and feminist perspectives.	GR	LE	Lecture
Spring 2008	PLS607	607	Seminar in Political Theory	PLS	Political Science	4	Readings, research, reports, and discussion on selected theorists, topics, and problems.	GR	SE	Seminar
Spring 2008	PLS608	608	Radical Black Thought	PLS	Political Science	4	Examines radical black thought and philosophy from a Pan-Africanist perspective, primarily focuses on the 20th century.	GR	LE	Lecture

Spring 2008	PLS611	611	Seminar in Methodology	PLS	Political Science	4	Techniques and methods relating to research in political science; application to individual projects and research designs.	GR	SE	Seminar
Spring 2008	PLS612	612	Topics-Emperical Pol Analysis	PLS	Political Science	4	Selected topics of methodological or analytical concern in contemporary political research.	GR	LE	Lecture
Spring 2008	PLS620	620	Politics & the Novel	PLS	Political Science	4	(Also listed as ENG 660.) Study and critique of political themes in works of selected 20th century authors, including social roles, activism, political awareness, power, government, and conflict at the individual, institutional, and international level.	GR	LE	Lecture
Spring 2008	PLS627	627	Urban Policy Analysis	PLS	Political Science	4	(Also listed as URS 627.) Selected urban problems and their relationship to the political environment; explores program design and evaluation, and the use of social indicators.	GR	LE	Lecture
Spring 2008	PLS628	628	Contemp Afr-Amer Problems	PLS	Political Science	4	Critical pedagogy allows for an in-depth exploration of many problematic issues that assail African Americans from outside and within the black community. Several possible explanations and solutions will be addressed.	GR	LE	Lecture
Spring 2008	PLS630	630	Seminar-Amer Politics & Govt	PLS	Political Science	4	Selected topics related to American political institutions and processes. Emphasis on readings, discussion, and research. Topics vary.	GR	SE	Seminar

Spring 2008	PLS631	631	Cyber Crime	PLS	Political Science	4	Investigation of political and legal issues in computer and Internet based crime, including child pornography, computer fraud, and identity theft, prevention of cyber crime and responsibilities of computer owners and Internet servers.	GR	LE	Lecture
Spring 2008	PLS633	633	Public Opinion	PLS	Political Science	4	Opinion formation in American politics; relationship of opinion to public policy; voting behavior in American elections; role of mass media and political interest groups in the policy process; and development of political attitudes and values.	GR	LE	Lecture
Spring 2008	PLS634	634	Political Leadership	PLS	Political Science	4	Involves the study of political attitude development. The acquisition of basic political orientations and values, beginning with childhood and proceeding through adolescence and adulthood. Investigation of the role of various socializing agents.	GR	LE	Lecture
Spring 2008	PLS635	635	Seminar - Political Corruption	PLS	Political Science	4	Analysis of political corruption, including campaigns and elections, graft, the executive branch, congressional ethics, corruption in law enforcement, organized crime, and abuse of authority.	GR	SE	Seminar

Spring 2008	PLS636	636	Criminal Law	PLS	Political Science	4	Examines the nature of the criminal law and reviews the law pertaining to criminal liability; inchoate crimes; the elements of crimes against persons, property, and habitation; and the defenses to criminal actions.	GR	LE	Lecture
Spring 2008	PLS637	637	Criminal Procedure	PLS	Political Science	4	Examines the constitutional protections that the individual has when confronting the criminal justice system and examines the case law pertaining to the Fourth Amendment (search and seizure), Fifth Amendment (self-incrimination), and Sixth Amendment (right to counsel).	GR	LE	Lecture
Spring 2008	PLS638	638	Envirnmental Law & Policy	PLS	Political Science	4	Examines environmental law and policy and reviews the statutory framework pertaining to environmental impact statements, the regulation of air and water pollution, the disposal and cleanup of toxic wastes, and workplace safety	GR	LE	Lecture
Spring 2008	PLS639	639	Bioethics&Law :Abortion,Dth/ Med	PLS	Political Science	4	New biological technologies are emerging that increase our control over human behavior. Course examines legal implications of new biological technologies, particularly mind and behavior control, genetic engineering, birth and death control and organ transplantation.	GR	LE	Lecture

Spring 2008	PLS640	640	Constitutional Law	PLS	Political Science	4	Cases in which provisions of the Constitution have been judicially interpreted; federal systems; separation of powers; and limits on government.	GR	LE	Lecture
Spring 2008	PLS641	641	Natural Resources Law	PLS	Political Science	4	This course examines federal management of natural resources on public lands, specifically, water, minerals, timber, grazing, and wildlife. Constitutional authority, statutes, regulations, federalism, and judical review of administrative decisions are analyzed.	GR	LE	Lecture
Spring 2008	PLS642	642	American Criminal Justice Syst	PLS	Political Science	4	Survey of the American criminal justice system, concentrating on political aspects. Topics include police, judges, attorneys, Supreme Court decisions, crime, and public opinion.	GR	LE	Lecture
Spring 2008	PLS643	643	Administrative Law Procedure	PLS	Political Science	4	Study of the law controlling the process by which public agencies make and administer policy. Topics include policy formulation and budgeting, legislative delegation, administrative agencies, rule-making, and adjudication.	GR	LE	Lecture
Spring 2008	PLS644	644	Topics in Criminal Justice	PLS	Political Science	4	Problems, approaches, and topics in the field of criminal justice. Topics vary.	GR	LE	Lecture

Spring 2008	PLS645	645	Adv Criminal Investigation	PLS	Political Science	4	Criminal investigative techniques including forensics, evidence, interviews, and interrogation as applied to specific types of crimes.	GR	LE	Lecture
Spring 2008	PLS646	646	Public Budgeting	PLS	Political Science	4	Examination of the major phases of the governmental budget cycle; types of budget; budgetary reform; economic and public policy impact of government budgeting; decision-making; and legislative-executive relations in budget formation and implementation.	GR	LE	Lecture
Spring 2008	PLS647	647	Sem Pub Admin	PLS	Political Science	4	Selected national, state, and local problems with emphasis on legal scope of administrative power and on research methods used by staff agencies. Topics vary.	GR	SE	Seminar
Spring 2008	PLS648	648	Gender Violence & Amer Pol	PLS	Political Science	4	Examines gender violence in the U.S. Considers the range of violence, its sources, and solutions. Topics include domestic violence, rape, eating disorders, reproductive rights, and pornography.	GR	LE	Lecture
Spring 2008	PLS649	649	Intl Politics-Gender Violence	PLS	Political Science	4	Cross cultural examination of gender violence. Considers the range of violence, its sources, and solutions. Topics include domestic abuse, rape, female genital surgeries, prostitution, and reproductive rights.	GR	LE	Lecture

Spring 2008	PLS651	651	Contemp African Politics	PLS	Political Science	4	Political processes and governmental institutions of sub-Saharan Africa; special attention to dynamics of political development and socioeconomic change. Comparative analysis of selected African political systems.	GR	LE	Lecture
Spring 2008	PLS652	652	Intl Human Rights	PLS	Political Science	4	Examines the role of human rights in international relations. Considers contending definitions of human rights and debates over policy by focusing on case studies including South Africa, China, Guatemala, and Bosnia.	GR	LE	Lecture
Spring 2008	PLS653	653	Soviet Successor States	PLS	Political Science	4	Examines the political life in the former Soviet Union, with emphasis on the legacy of communism and the role of economics and politics in the transition to democracy.	GR	LE	Lecture
Spring 2008	PLS654	654	Politics of the Middle East	PLS	Political Science	4	Introduction to governments and politics of the Middle East with special attention to cultural and historical background and the Arab-Israeli conflict.	GR	LE	Lecture
Spring 2008	PLS655	655	Israeli & Palestinian Politics	PLS	Political Science	4	A seminar covering the development and current status of Israeli and Palestinian politics, with emphasis on the Palestinian-Israeli conflict, and the government and politics of Israeli and the Palestinian authority.	GR	LE	Lecture

Spring 2008	PLS656	656	Canadian Government & Politics	PLS	Political Science	4	This course examines Canadian government and politics, including political values and culture, as well as institutions and processes. The Canada-US relationship, and similarities and differences between the two systems will be examined.	GR	LE	Lecture
Spring 2008	PLS657	657	Scandanavian Govt & Politics	PLS	Political Science	4	An examination of the theory and practice of Scandanavian government and politics. Consideration of both the political values and culture of the region as well as its prime political institutions and processes.	GR	SE	Seminar
Spring 2008	PLS658	658	Latin American Politics	PLS	Political Science	4	Selected issues in the study of Latin American politics with an emphasis on the nature of the state and the role of instiutions such as the military and unions in politics. Examples from major South American states and Mexico where appropriate.	GR	LE	Lecture
Spring 2008	PLS659	659	Contemporary Brazil	PLS	Political Science	4	Introduction to Brazilian politics, society and economy. Topics include Brazil's political and economic liberalization, its international relations, gender and race relations, and the environment.	GR	LE	Lecture
Spring 2008	PLS660	660	Seminar-Comp Political Systems	PLS	Political Science	4	Readings, research, reports, and discussion of selected topics and problems. Topics vary.	GR	SE	Seminar

Spring 2008	PLS661	661	Social Movements and Protests	PLS	Political Science	4	Examines group behavior motivated by the desire to change political, economic, and social systems. Special attention will be given to movements outside of the United States, including cross-national and global movements.	GR	LE	Lecture
Spring 2008	PLS662	662	Comparative Revolutions	PLS	Political Science	4	Survey of theoretical literature on revolutions: what they are, how and why they occur. Explores different approaches to the topic and some of the current debates in the literature. Applies theory to actual historical cases.	GR	LE	Lecture
Spring 2008	PLS665	665	Politics of Nationalism	PLS	Political Science	4	Compare ethnic identity and politics in western societies, including the United States, Canada, Great Britian and France. Topics include minorities and the welfare state, affirmative discrimination, and Black Politics in the United States.	GR	LE	Lecture
Spring 2008	PLS666	666	Politics of South Asia	PLS	Political Science	4	This course examines the role played by South Asia in shaping the political, economic and security landscapes around the world. Focus will be on four countries in the region: India, Pakistan, Bangladesh and Nepal.	GR	LE	Lecture

Spring 2008	PLS667	667	Political Systems of China	PLS	Political Science	4	Analysis of political structures and processes of Communist China; focus on dynamic factors of socioeconomic and political development.	GR	LE	Lecture
Spring 2008	PLS670	670	Sem in International Relations	PLS	Political Science	4	Readings, research, reports, and discussion on selected topics and problems.	GR	SE	Seminar
Spring 2008	PLS671	671	International Law	PLS	Political Science	4	Study of rules governing the conduct of international politics with emphasis on their relevance to current world problems.	GR	LE	Lecture
Spring 2008	PLS672	672	International Terrorism Sem	PLS	Political Science	4	Surveys the phenomenon of terrorism: who employs it, how and why it occurs in international politics, and how targets respond to terrorism.	GR	SE	Seminar
Spring 2008	PLS673	673	American Foreign Policy	PLS	Political Science	4	Role of the United States in contemporary international politics and the relationship of the domestic political system to that role. Discussion of current problems.	GR	LE	Lecture
Spring 2008	PLS674	674	Politics of Women Terrorists	PLS	Political Science	4	Examines the political behavior of women in crime and terrorism, including the roles played by women in criminal activities and terrorist groups.	GR	SE	Seminar
Spring 2008	PLS675	675	Women,Gender & World Pol	PLS	Political Science	4	An examination of the position of women and the power of gender in world politics through the feminist international relations theory and case studies of women in international politics.	GR	LE	Lecture

Spring 2008	PLS682	682	Legislative Internship	PLS	Political Science	4	Experiential internship in the office of a state legislator, including office work, constituent assistance and research.	GR	IN	Internship
Spring 2008	PLS685	685	Chinese Foreign Policy	PLS	Political Science	4	Examines foreign policy perspectives of modern Chinese leaders, including historical, political, economic and ideological priorities. Special attention will be given to China-US relations, as well as China's role in international and regional organizations.	GR	LE	Lecture
Spring 2008	PLS686	686	Model UN seminar	PLS	Political Science	4	Model UN is an experiential learning opportunity built around the seminar, with intensive training in research, public speaking, bargaining, and conflict resolution. It culminates at the national collegiate conference in New York, simulating the United Nations.	GR	SE	Seminar
Spring 2008	PLS687	687	Hst&Pol-Intelligence Gathering	PLS	Political Science	4	This course examines the history of intelligence gathering, analysis and application in policy-making in the United States. The tension inherent in a secret agency operating within a democratic state and the role of technology are addressed.	GR	LE	Lecture
Spring 2008	PLS690	690	Independent Reading	PLS	Political Science	1	Supervised individual readings on selected topics.	GR	IS	Independent Study
Spring 2008	PLS691	691	Independent Research	PLS	Political Science	1	Supervised individual research on selected topics.	GR	IS	Independent Study

Spring 2008	PLS692	692	Independent Field Experience	PLS	Political Science	1	Supervised individual projects. May involve intern programs in local government or other special programs.	GR	IS	Independent Study
Spring 2008	PLS693	693	Contemporary Problems	PLS	Political Science	1	Advanced study in selected topics in political science. Topics frequently include new developments in the methodology or subject matter of the various sub-fields of the discipline. May be repeated for credit.	GR	LE	Lecture
Spring 2008	PLS694	694	Special Topics	PLS	Political Science	1	Study of particular political problems of contemporary significance.	GR	LE	Lecture
Spring 2008	PLS701	701	ICP Statistics I	PLS	Political Science	4	Emphasis on statistical literacy and data analysis in political science. Discusses reliability, validity, hypothesis testing, measurement and probability.	GR	LE	Lecture
Spring 2008	PLS702	702	ICP Statistics II	PLS	Political Science	4	Continued emphasis on statistical literacy and data analysis in political science, with focus on regression and time series.	GR	LE	Lecture
Spring 2008	PLS703	703	ICP Research Design	PLS	Political Science	4	Addresses fundamentals of qualitative and quantitative research in social science; with emphasis on skills needed to complete masters thesis or project.	GR	LE	Lecture
Spring 2008	PLS730	730	ICP Theories	PLS	Political Science	4	Introduction to the theories and concepts employed in modern political analysis with emphasis on the study of international relations and comparative policies.	GR	LE	Lecture

Spring 2008	PLS731	731	ICP Graduate Seminar	PLS	Political Science	4	Selected topics or issue areas in international relations or comparative politics. May be repeated for credit under a differing subtitle.	GR	SE	Seminar
Spring 2008	PLS779	779	Practicum	PLS	Political Science	1	Field experience for students in selected settings. Jointly supervised by faculty and on-site personnel. May be repeated up to a total of 4 credits.	GR	PR	Practicum
Spring 2008	PLS789	789	Continuing Registration	PLS	Political Science	1	Continuing registration.	GR	IS	Independent Study
Spring 2008	PLS798	798	Graduate Project	PLS	Political Science	1	Practical application of knowledge gained through coursework and field experience applied to a capstone project.	GR	LE	Lecture
Spring 2008	PLS799	799	Graduate Thesis Research	PLS	Political Science	1	Research for Master's Thesis.	GR	LE	Lecture
Spring 2008	POR101	101	First Year Portuguese	POR	Portuguese	4	Study of the vocabulary and structure of the Portuguese language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	POR102	102	First Year Portuguese	POR	Portuguese	4	Study of the vocabulary and structure of the Portuguese language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	POR103	103	First Year Portuguese	POR	Portuguese	4	Study of the vocabulary and structure of the Portuguese language; practice in conversation, reading, and writing.	UG	LE	Lecture

Spring 2008	POR111	111	Essentials of Portuguese	POR	Portuguese	4	Introduction to Portuguese with an emphasis on speaking the language. May be taken for a letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	POR112	112	Essentials of Portuguese	POR	Portuguese	4	Introduction to Portuguese with an emphasis on speaking the language. May be taken for a letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	POR201	201	Second Year Portuguese	POR	Portuguese	4	Grammar review, reading, and discussion of selected texts with practice in speaking and writing the language.	UG	LE	Lecture
Spring 2008	POR202	202	Second Year Portuguese	POR	Portuguese	4	Grammar review, reading, and discussion of selected texts with practice in speaking and writing the language.	UG	LE	Lecture
Spring 2008	PSI801	801	History & Systems - Psychology	PSI	Professional Psychology	3	Historical and philosophical precursors philosophers' and recent thinkers' views of epistemology, existentialism, consciousness, and behavior.	GR	LE	Lecture
Spring 2008	PSI802	802	Memory,Cognition-Ind Inf Proc	PSI	Professional Psychology	3	Structure of human cognitive systems. Relationship of individual differences, including cognitive styles and intelligence test performance, and cognitive structure and processing. Applications to clinical and training problems.	GR	LE	Lecture

Spring 2008	PSI803	803	Fundamentals of Learning	PSI	Professional Psychology	1	An overview of theories of learning including classical and operant conditioning and verbal learning. Course includes application of learning theories in the development and treatment of psychological disorders. Titles vary.	GR	LE	Lecture
Spring 2008	PSI804	804	Adv Statistics & Exp Design I	PSI	Professional Psychology	3	Strengths, limitations, and applications of research designs. Statistical theory and principles of descriptive and major parametric and nonparametric inferential procedures. Develops ability to critically review research, demonstration, and evaluation results. Lecture, lab, field work. Titles vary.	GR	LE	Lecture
Spring 2008	PSI805	805	Adv Statistics & Exp Design II	PSI	Professional Psychology	3	This is a continuation of PSI 804-Advanced Statistics and Experimental Design I. Titles vary.	GR	LE	Lecture
Spring 2008	PSI806	806	Interviewing I	PSI	Professional Psychology	3	Process of client designation, problem identification, and functional analysis. Client expectancy, establishing relationships, developing information base for linking, consultation, and referral. Interviewing styles and types. Lecture, lab, field work. Titles vary.	GR	LE	Lecture

Spring 2008	PSI807	807	Interviewing II	PSI	Professional Psychology	1	Process of client designation, problem identification, and functional analysis. Client expectancy, establishing relationships, developing information base for linking, consultation, and referral. Interviewing styles and types. Lecture, lab, field work. Titles vary.	GR	LE	Lecture
Spring 2008	PSI808	808	Professional Development	PSI	Professional Psychology	0	Issues relevant to students' development as professional psychologists including professional involvement, legal and legislative issues, professional ethics and standards, and relation with other professional groups.	GR	LE	Lecture
Spring 2008	PSI810	810	Psychological Assmnt 1	PSI	Professional Psychology	1	The basics of psychological assessment. Reliability and validity of measurement, current issues in measurement, clinical interviewing and mental status examination are covered. As time allows, an introduction to theories of intelligence is presented. Titles vary. May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture

Spring 2008	PSI811	811	Psy Assessment II: Cognitive	PSI	Professional Psychology	3	Basic intelligence and aptitude assessment devices and interface with intervention plans. Biological individual, and social system influences, and minority and social class issues in assessment. Lecture, lab, field work. Titles vary. Lab may be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	PSI811L	811L	Lab in Psy Assess II: Cognitiv	PSI	Professional Psychology	1		GR	LB	Lab
Spring 2008	PSI812	812	Psychological Assessment III	PSI	Professional Psychology	3		GR	LE	Lecture
Spring 2008	PSI812L	812L	Psych Assessment III Lab	PSI	Professional Psychology	3		GR	LB	Lab
Spring 2008	PSI813	813	Projective Assessment I	PSI	Professional Psychology	1	Overview of the administration, scoring, and interpretation of several projective techniques including projective drawings, Incomplete Sentence Blanks, the Thematic Apperception Test (TAT), the Children's Apperception Test (CAT), and other storytelling techniques. Titles vary. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture

Spring 2008	PSI814	814	Educational Assessment	PSI	Professional Psychology	1	Covers the issues and methods surrounding the assessment of various types of academic/learning problems including academic underpreparation, impact of psychological impairment, impact of physical impairment, specific learning disabilities, and adult ADHD. Titles vary. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	PSI819	819	Multicultural Lab: I	PSI	Professional Psychology	1	Focuses on the recognition of cultural diversity issues as an integral component of a psychologist's clinical and professional responsibilities and the incorporation of these issues into one's evolving professional identity. May be taken for a letter grade or pass/unsatisfactory.	GR	LB	Lab
Spring 2008	PSI820	820	Multicultural Lab: II	PSI	Professional Psychology	1	Continuation of PSI 819.	GR	LB	Lab
Spring 2008	PSI821	821	Ethnocultural Issues	PSI	Professional Psychology	3	Effects of prejudice, social policies, housing desegregation, and language styles on work and other relationships. Problem areas, strengths of minorities. Managing prejudice within the professional/client relationship. Lecture, lab, field work.	GR	LE	Lecture

Spring 2008	PSI822	822	Gender Issues	PSI	Professional Psychology	1	Explores the impact of gender on human behavior with specific focus on the role of gender in psychological assessment and practice. Titles vary.	GR	LE	Lecture
Spring 2008	PSI830	830	Physiological Psychology: I	PSI	Professional Psychology	3	Personality and behavior in a clinical setting. Psychodynamic, phenomenological, dispositional, and behavioral theories of personality. Role of cognition, person-situation interaction, extroversion, self-esteem, and achievement motivation in therapy.	GR	LE	Lecture
Spring 2008	PSI831	831	Adult Psychopathology	PSI	Professional Psychology	3	Covers definition and models of psychopathology including biochemical, genetic, dynamic, and behavioral dimensions; diagnostic systems, differential diagnosis, and treatment selection. Variables affecting individual and group functioning also are covered.	GR	LE	Lecture
Spring 2008	PSI832	832	Child Psychopathology	PSI	Professional Psychology	3	Classification and diagnostic systems related to children. Behavioral problems and related problems in life adjustment, learning, and adaption to peers. Current theories of etiology and treatment interventions.	GR	LE	Lecture

Spring 2008	PSI835	835	Human Development	PSI	Professional Psychology	3	Conceptualizations of infancy, early childhood, and adolescence including physical, cognitive, intellectual, social, and interpersonal development. Lecture, lab, field work. Titles vary.	GR	LE	Lecture
Spring 2008	PSI840	840	Social Psychology	PSI	Professional Psychology	3	Theories and experimental findings regarding determinants of social behavior including social motivation, attribution theory, perception of people, attitude theories, group processes, interpersonal attraction, and environmental determinants of behavior. Lecture, lab, field work.	GR	LE	Lecture
Spring 2008	PSI841	841	Group Psychotherapy	PSI	Professional Psychology	3	Background, development, and theory of small groups. Effective leadership techniques and procedures for planning, conducting, and evaluating group interaction and progress. Lecture, lab, field work.	GR	LE	Lecture
Spring 2008	PSI841L	841L	Group Psychotherapy Lab	PSI	Professional Psychology	1	Laboratory portion of the PSI 841. Provides students with hands on experience in forming, conducting and evaluating group interaction and progress. May be taken for a letter grade or pass/unsatisfactory.	GR	LB	Lab

Spring 2008	PSI842	842	Crisis Intervention	PSI	Professional Psychology	3	Theory and definition of crisis. Individual and community support systems and crisis programs in hospitals, suicide and crisis centers, and office, family, and other settings. Lecture, lab, field work. Concurrent enrollment in lecture and lab is required.	GR	LE	Lecture
Spring 2008	PSI842L	842L	Crisis Intervention Laboratory	PSI	Professional Psychology	1	Laboratory portion of PSI 842.	GR	LB	Lab
Spring 2008	PSI850	850	Physiological Psychology	PSI	Professional Psychology	3	Physiology of body systems including endocrine, nervous, musculoskeletal, respiratory, cardiovascular, reproductive, and renal systems. Autonomic and endocrine regulation of body systems in homeostasis and during stress.	GR	LE	Lecture
Spring 2008	PSI851	851	Elective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture

Spring 2008	PSI852	852	Systems of Psychotherapy	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	PSI872	872	Service Delivery Systems	PSI	Professional Psychology	3	Problem identification, analysis, intervention management, planning, and evaluation related to systems of service, organization, and support. Quality assurance, operations theory, and evaluation applied to service delivery. Lecture, lab, field work.	GR	LE	Lecture
Spring 2008	PSI873	873	Consultation	PSI	Professional Psychology	3	Consultation as used for analysis and change in human service settings, business, and industry. Learning principles used to change public, community, group, and individual behavior. Lecture, lab, field work.	GR	LE	Lecture
Spring 2008	PSI874	874	Organizational Psychology	PSI	Professional Psychology	3	Analysis and assessment of systems, management styles, work environments, stress and stress management, and executive assessment. Personnel relations, productivity, and human factors (human/machine interface) are considered. Lecture, lab, field work.	GR	LE	Lecture

Spring 2008	PSI875	875	Forensic Psychology:Criminal	PSI	Professional Psychology	3	Introduction to legal and criminal justice system. Study of criminal and civil law in relation to professional practice. Study of evidentiary procedures. Discussion of adversary procedures.	GR	LE	Lecture
Spring 2008	PSI880	880	Elective	PSI	Professional Psychology	1	Intense treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary.	GR	LE	Lecture
Spring 2008	PSI881	881	Elective	PSI	Professional Psychology	1	Intense treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary.	GR	LE	Lecture
Spring 2008	PSI882	882	Elective	PSI	Professional Psychology	1	Intense treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary.	GR	LE	Lecture

Spring 2008	PSI883	883	Diversity Integration IV	PSI	Professional Psychology	3	This is the fourth in a four course series, capstone course in the Diversity Integration series. Emphasis is on case conceptualization, review of cases drawn from practicum, and treatment planning incorporating multiple identities.	GR	LE	Lecture
Spring 2008	PSI908	908	Practice Tutorial	PSI	Professional Psychology	1	Exposure to a variety of clinical case materials using a vertical team format. Titles vary.	GR	LE	Lecture
Spring 2008	PSI910	910	Elective	PSI	Professional Psychology	1	Neurophysiology emphasizing major CNS structures and tracts, location and function of cranial nerve nuclei and cranial nerve pathways. Organization of CNS vasculature and localization of function. Lecture, lab, field work.	GR	LE	Lecture
Spring 2008	PSI911	911	Neuropsychology I	PSI	Professional Psychology	3		GR	LE	Lecture
Spring 2008	PSI912	912	Neuropsychology II	PSI	Professional Psychology	1	Introduction to the field of clinical neuropsychological assessment. Students will be provided with information relevant to the selection, administration, scoring, and interpretation of neuropsychological tests in different clinical situations.	GR	LE	Lecture

Spring 2008	PSI912L	912L	Neuropsychology II Lab	PSI	Professional Psychology	1	Lab portion of PSI 912- Neuropsychology II. Designed to provide students with hands-on experience in administration, scoring, and interpretation of neuropsychological tests such as those from the Benton laboratory, Halstead-Reitan Battery, and Boston process approach.	GR	LB	Lab
Spring 2008	PSI913	913	Projective Assessment II	PSI	Professional Psychology	4	Continuation of PSI 813- Projective Assessment I. Objective and projective techniques; how and when to administer, score, interpret, and convey results meaningfully. Emphasis on integrating these results into the clinical situation. Lecture, lab, field work.	GR	LL	Lecture/Lab Combination
Spring 2008	PSI914	914	Elective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary.	GR	LE	Lecture
Spring 2008	PSI915	915	Child Assessment	PSI	Professional Psychology	1	Overview of child assessment theory, techniques, and strategies to prepare students for further practical work in the assessment of child functioning. Titles vary.	GR	LE	Lecture

Spring 2008	PSI916	916	Forensic Assessment	PSI	Professional Psychology	1	Focuses on the interface between psychological assessment and the legal arena. Titles vary.	GR	LE	Lecture
Spring 2008	PSI917	917	Elective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary.	GR	LE	Lecture
Spring 2008	PSI918	918	Integrative Assessment	PSI	Professional Psychology	1	Provides a format for integrating various psychological tests into a coherent battery. In addition to addressing the evaluation of various psychological disorders, an approach is provided for constructing batteries for unique populations. Titles vary.	GR	LE	Lecture
Spring 2008	PSI920	920	Multicultural Couples	PSI	Professional Psychology	1	Explores multicultural issues in couples therapy and combines clinical theory and skills development with an appreciation of ethnicity, race, family of origin, values, and sexual orientation as cultural perspectives. Titles vary.	GR	LE	Lecture

Spring 2008	PSI921	921	Gay/Lesbian Issues	PSI	Professional Psychology	1	Issues central to psychological intervention with gay/lesbian clients including dealing with homophobia/heterophilia, development of a positive gay/lesbian identity, coming-out issues, and issues for gay/lesbian couples and families. Titles vary.	GR	LE	Lecture
Spring 2008	PSI922	922	Elective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary.	GR	LE	Lecture
Spring 2008	PSI923	923	Elective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary.	GR	LE	Lecture
Spring 2008	PSI924	924	Elective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary.	GR	LE	Lecture
Spring 2008	PSI925	925	Career Assessment	PSI	Professional Psychology	3		GR	LE	Lecture

Spring 2008	PSI930	930	Psychodynamic Psychotherpy I	PSI	Professional Psychology	1	Freud and development of psychoanalysis, neo-Freudian, and ego psychology schools. Structural aspects, techniques, and evaluation of psychoanalysis including stages of development, the unconscious, and psychodynamics. Titles vary.	GR	LE	Lecture
Spring 2008	PSI931	931	Psychodynamic Psychotherpy II	PSI	Professional Psychology	1	Second quarter of a three quarter sequence designed to teach theory, research, and applications of psychodynamic, object relations, and self psychology. Titles vary.	GR	LE	Lecture
Spring 2008	PSI932	932	Psychodynamic Psychotherpy III	PSI	Professional Psychology	1	Focuses on the efficacy of brief dynamic treatments, examines the research on empirically validated and nonvalidated dynamic treatment protocols for DSM-IV Axis I and II disorders. Titles vary.	GR	LE	Lecture
Spring 2008	PSI933	933	Behavioral Psychotherapy I	PSI	Professional Psychology	1	History and assumptions of behavior therapy. Assessment for behavioral intervention techniques of behavior therapy emphasizing cognitive approaches. Intervention in problem areas with high probability outcomes. Lecture, lab, field work. Titles vary.	GR	LL	Lecture/Lab Combination
Spring 2008	PSI934	934	Bhvrl Psychthrpy II:Cognitive	PSI	Professional Psychology	1	Continuation of PSI 933. Titles vary.	GR	LE	Lecture

Spring 2008	PSI935	935	Bhvrl Psychthr III:Adv Cog Thr	PSI	Professional Psychology	1	Refractory depressive and anxious mood states in clinical practice and complication of therapeutic effectiveness by co-morbid personality disorders. Emphasis on conceptual and technical approach to treatment. Titles vary.	GR	LE	Lecture
Spring 2008	PSI936	936	Humanistic Psychotherapy I	PSI	Professional Psychology	3	Theory, technique, and research base of client-centered psychotherapy. Theory of assessment procedures and techniques of transactional analysis. Gestalt psychotherapy and selected existential approaches. Lecture, lab, field work. Titles vary.	GR	LE	Lecture
Spring 2008	PSI937	937	Humanistic Psychotherapy II	PSI	Professional Psychology	1	Continuation of PSI 936. Course is the second quarter of a three quarter sequence. Titles vary.	GR	LE	Lecture
Spring 2008	PSI938	938	Humanistic Psychotherapy III	PSI	Professional Psychology	1	Seminar exploring in-depth Humanistic theory, research, and practice skills that can be utilized by a general practitioner of clinical psychology. Titles vary.	GR	LE	Lecture
Spring 2008	PSI940	940	Chemical Dependency	PSI	Professional Psychology	3	Incidence and prevalence of use and misuse of substances, with emphasis on addiction syndromes and stages of alcoholism/addiction. Theories of addiction/misuse and underlying personality dynamics and styles. Lecture, lab, field work.	GR	LE	Lecture

Spring 2008	PSI941	941	Advanced Group Therapy	PSI	Professional Psychology	1	Addresses practical and clinical aspects of conducting group therapy. Titles vary.	GR	LE	Lecture
Spring 2008	PSI942	942	Brief Psychotherapy	PSI	Professional Psychology	1	Study and discussion of problem-focused, time-limited interventions. Study of concepts and techniques; use of programmatic and group methods. Titles vary.	GR	LE	Lecture
Spring 2008	PSI943	943	Selective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Topics vary.	GR	LE	Lecture
Spring 2008	PSI944	944	Child Therapy	PSI	Professional Psychology	3	Behavior disorders of children and adolescents. Behavior therapy, group therapy, family therapy, milieu therapy, and pharmacotherapy as intervention techniques. Problems associated with the treatment of children. Lecture, lab, field work.	GR	LE	Lecture
Spring 2008	PSI945	945	Medical Family Therapy	PSI	Professional Psychology	1	Multidisciplinary seminar introducing students to principles of family-focused health care and collaborative team practices.	GR	LE	Lecture

Spring 2008	PSI946	946	Couples/Family Therapy Methods	PSI	Professional Psychology	1	Different from a beginning survey course, students will apply a more limited focus to the study of family psychology and family therapy. Students will select a theoretical framework or approach to treatment which they intend to research and/or apply to case examples and scholarly exposition. Titles vary.	GR	LE	Lecture
Spring 2008	PSI947	947	Aids:Clinical Issues-Clnts/Fam	PSI	Professional Psychology	1	Explores the physiological, psychological, social, economic, and political aspects of HIV infection and AIDS with an emphasis on the unique role of psychologist as one of the many health care professionals with whom PLWAs and their families interact. Titles vary.	GR	LE	Lecture
Spring 2008	PSI948	948	Domestic Violence	PSI	Professional Psychology	1	Seminar addresses research and clinical issues regarding domestic violence. Explores impact on and intervention with victims, perpetrators, children and adolescents, and society. Titles vary.	GR	LE	Lecture
Spring 2008	PSI949	949	Introduction to Sex Therapy	PSI	Professional Psychology	1	Assists students in expanding their knowledge base of human sexuality, developing awareness of personal sexual values, and increasing competence in intervening with clients' sexual concerns.	GR	LE	Lecture

Spring 2008	PSI950	950	Psychopharmacology	PSI	Professional Psychology	3	Interaction of genetic and environmental influences on behavior; inheritance of dominant, recessive, sex-linked characteristics; genetic influence in psychopathology, intellectual function, and personality development; and genetic counseling.	GR	LE	Lecture
Spring 2008	PSI951	951	Serving-Chronic Mentally Ill	PSI	Professional Psychology	1	Designed to impact the student's knowledge, skills, and attitudes about working with individuals and families affected by chronic mental illness. Titles vary.	GR	LE	Lecture
Spring 2008	PSI952	952	Family Therapy	PSI	Professional Psychology	3	Organization and structure of the family and common problem areas. Review of theories of family therapy and treatment strategies of marital and sexual dysfunctions. Lecture, lab, field work.	GR	LL	Lecture/Lab Combination
Spring 2008	PSI953	953	Health Psychology	PSI	Professional Psychology	3	Techniques of therapy applied to populations whose problems arise from faulty lifestyles and not from serious psychopathology. Topics include stress management, weight control, and health maintenance. Lecture, lab, field work.	GR	LE	Lecture
Spring 2008	PSI954	954	Intro to Cl Hypnosis	PSI	Professional Psychology	1	Beginning-level course addresses the nature and theory of hypnosis as well as the integration of this therapeutic technique into clinical practice. Titles vary.	GR	LE	Lecture

Spring 2008	PSI955	955	Geriatric Clinical Psy	PSI	Professional Psychology	3	Psychological and social derivation of stereotypes and prejudice and their maintenance. Techniques for assessing and modifying stereotypes and prejudice including self-awareness, group, educational, and environmental approaches. Lecture, lab, field work. Titles vary.	GR	LE	Lecture
Spring 2008	PSI956	956	Elective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary.	GR	LE	Lecture
Spring 2008	PSI957	957	Psychology of Women	PSI	Professional Psychology	1	Seminar addresses issues including, but not limited to, female development; the interaction of gender, race, ethnicity, and SES; body image; impact of female gender role on mental health. Feminist therapy is also covered. Titles vary.	GR	LE	Lecture
Spring 2008	PSI958	958	Feminist Therapy	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary.	GR	LE	Lecture

Spring 2008	PSI959	959	Integrat Psychotherapy	PSI	Professional Psychology	3	Practicum in developing, monitoring, and reviewing individualized service-by-objective plans and programmatic service plans. Peer review, criteria development, and other quality assurance methods are applied. Lecture, lab, field work.	GR	LE	Lecture
Spring 2008	PSI965	965	Supv & Case Management	PSI	Professional Psychology	1	Focuses on issues related to personal and professional practice management; i.e., time and resource management, quality assurance, fundamentals of service delivery systems, and case management activities. Development of general knowledge and skill acquisition in practice management.	GR	LE	Lecture
Spring 2008	PSI966	966	Professional Ethics/Issues	PSI	Professional Psychology	1	Provide a working knowledge of APA ethical principles and code of conduct, and Ohio law and rules governing psychologists. Increase sensitivity to potential ethical dilemmas and develop skills in identifying and resolving ethical dilemmas in professional psychology.	GR	LE	Lecture

Spring 2008	PSI967	967	Multiprofessional Ethics	PSI	Professional Psychology	1	Study and discussion between faculty and students from medicine, professional psychology, and theology concerning ethical issues and implication for client/patient care across professional disciplines. Titles vary. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	PSI968	968	Multiprofessional Issues	PSI	Professional Psychology	1	Brings together faculty and students from allied health, medicine, nursing, professional psychology and social work to study access to and utilization of primary care and prevention services in urban communities. Titles vary. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	PSI969	969	Practice Management	PSI	Professional Psychology	1	This course provides information on how to develop and maintain a private practice in clinical psychology. Included are topics such as developing a business plan, creating and understanding budgets, marketing a practice, dealing with third party payers, managing employees, and working with advisors and consultants.	GR	LE	Lecture

Spring 2008	PSI970	970	Elective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Titles vary. Topics vary.	GR	LE	Lecture
Spring 2008	PSI972	972	Program Evaluation	PSI	Professional Psychology	3	Emphasis on knowledge of measurement theory, test construction, survey methods, and questionnaire techniques. Study of reliability and validity of measurement devices. Familiarity with APA standards for tests and test usage.	GR	LE	Lecture
Spring 2008	PSI973	973	Teaching of Psychology	PSI	Professional Psychology	1	Seminar provides participants with a forum for exploring issues associated with teaching psychology in higher education settings. Titles vary.	GR	SE	Seminar
Spring 2008	PSI974	974	Grant Writing	PSI	Professional Psychology	1	Methods for locating funding sources as well as researching and writing grant applications. Seminar includes formats employed by state and federal funding agencies. Titles vary. May be taken for a letter grade or pass/unsatisfactory.	GR	SE	Seminar

Spring 2008	PSI975	975	Forensic Psychology:Civil	PSI	Professional Psychology	1	Continuation of PSI 875. Focuses on civil court proceedings such as civil commitment, family law, and professional practice issues. Forensic Psychology I is not a prerequisite, but those who have not had the course must meet with the instructor prior to enrolling. Titles vary. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	PSI976	976	Elective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Topics vary. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	PSI980	980	Elective	PSI	Professional Psychology	1	Issues relevant to students' development as professional psychologists including professional involvement, legal and legislative issues, professional ethics and standards, and relation with other professional groups.	GR	LE	Lecture

Spring 2008	PSI981	981	Elective	PSI	Professional Psychology	1	Provides for an in-depth exposure of students to a variety of clinical case materials under the direct supervision of experienced clinical faculty, using a vertical team format comprised of students at various levels of training and experience. Titles vary.	GR	LE	Lecture
Spring 2008	PSI982	982	Selective	PSI	Professional Psychology	1	Intensive treatment of subject materials or techniques providing students with increased experience or specialization in specific interventions, assessments, concepts, or approaches. Topics vary.	GR	LE	Lecture
Spring 2008	PSI994	994	Applied Teaching Practice	PSI	Professional Psychology	0	Students are given hands-on experience in assisting faculty in teaching a course or seminar. Issues dealt with are those common to most teaching settings: development of a syllabus, choice of teaching methods, grading/evaluation and obtaining feedback from students.	GR	LE	Lecture
Spring 2008	PSI995	995	Directed Study	PSI	Professional Psychology	1	Individualized course of readings completed under faculty supervision.	GR	IS	Independent Study
Spring 2008	PSI996	996	Elective	PSI	Professional Psychology	1	Research or evaluation performed under faculty supervision. Titles vary.	GR	LE	Lecture

Spring 2008	PSI997	997	Supervised Experience	PSI	Professional Psychology	1	Faculty supervised clerkship, field placement, or other isolated circumscribed professional experience.	GR	IS	Independent Study
Spring 2008	PSI998	998	Professional Dissertation	PSI	Professional Psychology	1	Project of excellence or other professional project carried out with faculty approval and supervision.	GR	IS	Independent Study
Spring 2008	PSI999	999	Internship	PSI	Professional Psychology	6		GR	IN	Internship
Spring 2008	PSY105	105	Pschol: Science Behav	PSY	Psychology	4	Course examines the science and principles of psychology. Topics include historical foundations and research methods, brain and behavior, learning, development, personality, memory, language, and the thinking process.	UG	LL	Lecture/Lab Combination
Spring 2008	PSY105L	105L	Psychol: Science Behav Lab	PSY	Psychology	0	Required laboratory for PSY 105.	UG	LB	Lab
Spring 2008	PSY110	110	Psy: Science & Practice	PSY	Psychology	4	Course examines the science and principles of psychology. Topics include social behavior, abnormal behavior, psychotherapies, stress and coping, motivation, intelligence, emotion, states of conciousness, and sensory and perceptual process.	UG	LE	Lecture
Spring 2008	PSY110W	110W	Writing in PSY 110	PSY	Psychology	0	Required writing component for PSY 110.	UG	LB	Lab

Spring 2008	PSY200	200	Psy Study Contemp Issues	PSY	Psychology	2	Selected psychological issues and their implications for contemporary society and intellectual thought. Topics vary.	UG	LE	Lecture
Spring 2008	PSY200W	200W	Writing in PSY 200	PSY	Psychology	0		UG	LB	Lab
Spring 2008	PSY208	208	Environmental Psychology	PSY	Psychology	4	Effects on behavior of environmental factors such as crowding, noise, pollution, temperature, lighting, and architecture. Applications of psychological knowledge and techniques in dealing with current environmental problems are also considered.	UG	LE	Lecture
Spring 2008	PSY210	210	Psychology of Women & Men	PSY	Psychology	4	Examines the current state of research evidence about sex differences in all aspects of human behavior, as well as patterns of public attitudes about the natures and proper roles of men and women.	UG	LE	Lecture
Spring 2008	PSY211	211	Human Sexuality	PSY	Psychology	4	Survey of the diversity of human sexual behavior focusing on the theory, current research, and psycho-social perspective on issues such as biology, coercion, counseling, enhancement, gender, infection, relationships, or sexual orientation.	UG	LE	Lecture

Spring 2008	PSY215	215	Psy Prin in Comm Films	PSY	Psychology	4	This course is designed to teach principles of psychology and their application through commercial films. Films will be selected to illustrate psychological themes. Students write short answers about how the film illustrates the themes. The instructor will raise the questions before the film so students can watch for specific themes. After the film, students will discuss the questions in class, in a web chat room, and on an electronic bulletin board.	UG	LE	Lecture
Spring 2008	PSY251	251	Stereotyping & Prejudice	PSY	Psychology	4	This course provides instruction into current topics related to stereotyping and prejudice. Course material stems from prominent researchers in the field of prejudice, while lectures are organized around discussions, videos, demonstrations, and experimental findings.	UG	LE	Lecture
Spring 2008	PSY291	291	Drugs and Behavior	PSY	Psychology	4	Introduces the major classes of psychoactive drugs, their behavioral effects, and mechanisms of action. The societal impact of some popular drugs is examined in terms of their effects on the brain, body and behavior.	UG	LE	Lecture

Spring 2008	PSY292	292	Hormones and Behavior	PSY	Psychology	4	An overview of hormone-behavior relationship in humans and animals. Topics include sexual differences, puberty, reproductive behavior, parental behavior, aggression, eating behavior, and cognition.	UG	LE	Lecture
Spring 2008	PSY294	294	Mind, Body & Consciousness	PSY	Psychology	4	An exploration of modern ideas about conciousness, how it is related to the mind and body, its usefulness, and its relationship to reality.	UG	LE	Lecture
Spring 2008	PSY301	301	Basic Research Methods	PSY	Psychology	4	Introduction to basics of research methods, descriptive data analysis, and writing research reports in APA format. Students use methods from representative areas in psychology to collect data and summarize them using APA style.	UG	LE	Lecture
Spring 2008	PSY301L	301L	Basic Research Methods Lab	PSY	Psychology	0	Required laboratory for PSY 301.	UG	LB	Lab
Spring 2008	PSY302	302	Experimental Methods	PSY	Psychology	4	Students will be introduced to experimental control, experimental designs, concepts in probability and inferential statistics. Students will conduct experiments in the laboratory sessions, learn to interpret data objectively, and write scientific reports. Writing Intensive.	UG	LE	Lecture
Spring 2008	PSY302L	302L	Experimental Methods Lab	PSY	Psychology	0	Required laboratory for PSY 302.	UG	LB	Lab

Spring 2008	PSY302W	302W	Writing in PSY 302	PSY	Psychology	0	Required writing component for PSY 302.	UG	LB	Lab
Spring 2008	PSY303	303	Alternative Res Methods	PSY	Psychology	4	Introduction to alternative research methods including correlational and mixed designs. Students use methods from representative areas in psychology to design a study, collect and analyze data, and present findings in APA style. Writing Intensive.	UG	LE	Lecture
Spring 2008	PSY303L	303L	Alternative Res Methods Lab	PSY	Psychology	0	Required laboratory for PSY 303.	UG	LB	Lab
Spring 2008	PSY303W	303W	Writing in PSY 303	PSY	Psychology	0	Required writing component for PSY 303.	UG	LB	Lab
Spring 2008	PSY304	304	Industrial & Organ Psy	PSY	Psychology	4	Scientific psychological principles, procedures, and methods applied to human behavior in organizations.	UG	LE	Lecture
Spring 2008	PSY306	306	Engineering Psy	PSY	Psychology	4	(Also listed as HFE 306.) Introduction to the study of human factors in the design and operation of machine systems.	UG	LE	Lecture
Spring 2008	PSY307	307	Tests and Measures	PSY	Psychology	4	Introduction to the use, application, evaluation, and development of psychological tests and measures such as ability, aptitude, attitude, standardized, or normed measures.	UG	LE	Lecture
Spring 2008	PSY309	309	Psy of Health Behavior	PSY	Psychology	4	Survey of the contributions of the psychology of health care. The focus is both theoretical and practical, emphasizing the integration of physiological and psychological knowledge.	UG	LE	Lecture

Spring 2008	PSY311	311	Abnormal Psychology	PSY	Psychology	4	Overview of facts and theories pertaining to abnormal behavior. Topics include classification and diagnosis, and causes and treatment of abnormal behavior.	UG	LE	Lecture
Spring 2008	PSY321	321	Cognition & Learning	PSY	Psychology	4	Theories, methodologies, and applications in the areas of attention, perception, visual imagery, memory, expert performance, decision making, and problem solving will be examined. The emphasis is on how the brain performs cognitive functions.	UG	LE	Lecture
Spring 2008	PSY323	323	Cognition & Learning Meth	PSY	Psychology	4	Laboratory research in various areas of cognitive psychology. Two hours lecture, four hours lab.	UG	LE	Lecture
Spring 2008	PSY323L	323L	Cognition & Learning Meth Lab	PSY	Psychology	0	Required laboratory for PSY 323.	UG	LB	Lab
Spring 2008	PSY331	331	Psychology of Personality	PSY	Psychology	4	Survey of contemporary perspectives in personality psychology. Research methods, assessment strategies, and applications are compared.	UG	LE	Lecture
Spring 2008	PSY333	333	Personality Research Meth	PSY	Psychology	4	Survey of research methods appropriate to personality assessment and analysis. Laboratory experience in the development, implementation, and analysis of a research project focused on an issue in personality psychology.	UG	LE	Lecture
Spring 2008	PSY333L	333L	Personlty Res Meth Lab	PSY	Psychology	0	Required laboratory for PSY 333.	UG	LB	Lab

Spring 2008	PSY341	341	Lifespan Development Psy	PSY	Psychology	4	Survey of theory, research, and methodological issues in the study of development across the life-span.	UG	LE	Lecture
Spring 2008	PSY343	343	Developmental Psy Methods	PSY	Psychology	4	Survey of research design appropriate to developmental analysis, innovations in developmental methodology, and laboratory experience in the selection, design, and analysis of developmental problems of specific interest to individual students. Two hours lecture, four hours lab.	UG	LE	Lecture
Spring 2008	PSY343L	343L	Devel Psychology Meth Lab	PSY	Psychology	0	Required laboratory for PSY 343.	UG	LB	Lab
Spring 2008	PSY351	351	Social Psychology	PSY	Psychology	4	Survey of current theories and experimental findings regarding the determinants of social behavior.	UG	LE	Lecture
Spring 2008	PSY353	353	Social Psychology Methods	PSY	Psychology	4	Laboratory course in methods and problems involved in social psychology research. Two hours lecture, four hours lab.	UG	LE	Lecture
Spring 2008	PSY353L	353L	Soc Psychology Meth Lab	PSY	Psychology	0	Required laboratory for PSY 353.	UG	LB	Lab
Spring 2008	PSY353W	353W	Writing in PSY 353	PSY	Psychology	0	Required writing component for PSY 353.	UG	LB	Lab
Spring 2008	PSY361	361	Conditioning and Learning	PSY	Psychology	4	Introduction to experimental findings and contemporary theories of conditioning, learning, and motivation.	UG	LE	Lecture

Spring 2008	PSY363	363	Cond & Learn Methods	PSY	Psychology	4	Problems and methods of research in conditioning, learning, and motivation. Two hours lecture, four hours lab.	UG	LE	Lecture
Spring 2008	PSY363L	363L	Cond & Learning Methods	PSY	Psychology	0	Required laboratory for PSY 363.	UG	LB	Lab
Spring 2008	PSY371	371	Perception	PSY	Psychology	4	Study of the active processes by which organisms gather, interpret, and respond to environmental stimuli.	UG	LE	Lecture
Spring 2008	PSY373	373	Perception Methods	PSY	Psychology	4	Laboratory experience and research techniques in various areas of perception. Two hours lecture, four hours lab.	UG	LE	Lecture
Spring 2008	PSY373L	373L	Perception Methods Lab	PSY	Psychology	0	Required laboratory for PSY 373.	UG	LB	Lab
Spring 2008	PSY391	391	Behavioral Neuroscience	PSY	Psychology	4	An introduction to the physiological mechanisms of behavior including relationships between the brain, hormones, and behavior. Specific topics may include reproduction, emotion, sleep, learning and memory, schizophrenia, and stress.	UG	LE	Lecture
Spring 2008	PSY392	392	Behavioral Neuroscience II	PSY	Psychology	4	Advanced materials on the physiology of behavior. Sensory, motor, ingestive and cognitive systems and addictive processes are evaluated in terms of underlying neural and hormonal systems.	UG	LE	Lecture

Spring 2008	PSY393	393	Behav Neuroscience Methods	PSY	Psychology	4	Overview of methods used in behavioral neuroscience. Includes neuroanatomical dissections, student presentations, animal testing, and manuscript preparation.	UG	LE	Lecture
Spring 2008	PSY393L	393L	Behavioral Neurosci Lab	PSY	Psychology	0	Required laboratory for PSY 393.	UG	LB	Lab
Spring 2008	PSY401	401	Adv Exp Desgn: Pkgd Comp	PSY	Psychology	4	Focus on the use of canned computer programs such as SPSS, SAS, and BIOMED in the design, analysis, and interpretation of behaviorally oriented research.	UG	LL	Lecture/Lab Combination
Spring 2008	PSY402	402	Adv Research Methods	PSY	Psychology	4	Introduction to Advanced Methods in select areas of psychology. Topic will vary by title.	UG	LE	Lecture
Spring 2008	PSY411	411	Adv Topics Abnormal Psy	PSY	Psychology	4	Theories and research relating to causes, symptoms, and influences of abnormal behavior.	UG	LE	Lecture
Spring 2008	PSY411W	411W	Writing in PSY 411	PSY	Psychology	0		UG	LB	Lab
Spring 2008	PSY419	419	Adv Topic Behave Neurosci	PSY	Psychology	4	Detailed examination of selected areas in physiological psychology.	UG	LE	Lecture
Spring 2008	PSY421	421	Adv Top in Cognition & Lrng	PSY	Psychology	4	Detailed examination of selected areas in cognition and learning.	UG	LE	Lecture
Spring 2008	PSY425	425	Human-Computer Interface	PSY	Psychology	4	Relationship of human cognitive, perceptual, and language processes to the effective operation of computer systems. Review of research and theory.	UG	LE	Lecture

Spring 2008	PSY431	431	Adv Topics in Personal	PSY	Psychology	4	Examination of selected topics in personality, including theory, research, and application.	UG	LE	Lecture
Spring 2008	PSY432	432	Practicum: Applied Psy	PSY	Psychology	4	Work under supervision in an applied psychological setting consistent with students individual interests (e.g., mental health agency, industrial, or organizational setting). Graded pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	PSY433	433	Devel Psychpathology	PSY	Psychology	4	Survey of theoretical approaches to the description and explanation of childhood psychopathology, overview of current research in the area of childhood psychopathology, and description of methodological problems involved in clinical research with children.	UG	LE	Lecture
Spring 2008	PSY438	438	Work Stress and Well-Being	PSY	Psychology	4	The concept of work and stress and its implications for well-being are discussed. Predictors in the organization of work and individual differences are identified, and interventions for managing work stress are explored.	UG	SE	Seminar
Spring 2008	PSY439	439	Theory & Res Clinical Psy	PSY	Psychology	4	Overview of contemporary clinical approaches, research techniques, and empirical data.	UG	LE	Lecture

Spring 2008	PSY441	441	Adv Topics in Development Psy	PSY	Psychology	4	Review of current theory, research, and applied issues in selected aspects of development across the lifespan.	UG	LE	Lecture
Spring 2008	PSY443	443	Psychometrics	PSY	Psychology	4	Measurement theory and its application to test development including concepts of reliability, validity, discrimination, and prediction.	UG	LE	Lecture
Spring 2008	PSY444	444	Adv Topics in I/O Psy	PSY	Psychology	4	Theories and research findings in selected topics in industrial psychology.	UG	LE	Lecture
Spring 2008	PSY447	447	Psychology of Aging	PSY	Psychology	4	Overview of the theories, methods, and research related to human aging. Focus on both current research and applications from psychology.	UG	LE	Lecture
Spring 2008	PSY451	451	Adv Topics in Social Psy	PSY	Psychology	4	Detailed examination of selected areas of current research in social psychology.	UG	LE	Lecture
Spring 2008	PSY452	452	Cross-Cultural Psy	PSY	Psychology	4	Cross-Cultural Psychology explores national differences in perception, cognition, and self-concept as well as in personality dynamics and interpersonal interactions. This more universal view of human thought and behavior addresses the challenges of globalization.	UG	LE	Lecture
Spring 2008	PSY454	454	Applied Sport Psychology	PSY	Psychology	4	The course examines the social aspects, psychological performance enhancement aspects, and health aspects of sports-related phenomena.	UG	LE	Lecture

Spring 2008	PSY455	455	Psycholinguistics	PSY	Psychology	4	An overview of Language: its development during the first years of life, its biological basis, its normal and abnormal characteristics.	UG	LE	Lecture
Spring 2008	PSY461	461	Adv Topics in Condition & Lrng	PSY	Psychology	4		UG	LE	Lecture
Spring 2008	PSY465	465	Information Processing	PSY	Psychology	4	Study of information processing skills such as selective attention, pattern recognition, reading, problem solving, and human performance.	UG	LE	Lecture
Spring 2008	PSY471	471	Adv Topics in Perception	PSY	Psychology	4	Emphasis on modern controversial issues and theories.	UG	LE	Lecture
Spring 2008	PSY475	475	Signal Detection Theory	PSY	Psychology	4	Presents signal detection theory in the context of Thurstonian scaling and statistical decision theory. Studies the application of signal detection theory in various areas of psychology including psychophysics, memory, physiology, and psycholinguistics.	UG	LE	Lecture
Spring 2008	PSY478	478	Animal Behavior	PSY	Psychology	4	Physiology, phylogeny, and ontogeny of behavior. This is writing intensive.	UG	LE	Lecture
Spring 2008	PSY478W	478W	Writing in PSY 478	PSY	Psychology	0	Required writing component for PSY 478.	UG	LB	Lab
Spring 2008	PSY481	481	History of Psychology	PSY	Psychology	4	Major trends in the development of psychology from its beginnings to the modern period.	UG	LE	Lecture
Spring 2008	PSY481W	481W	Writing in PSY 481	PSY	Psychology	0	Required writing component for PSY 481.	UG	LB	Lab

Spring 2008	PSY487	487	Capstone Seminar	PSY	Psychology	4	Writing and oral communication intensive seminar integrating knowledge on select topics. Topic will vary by title.	UG	SE	Seminar
Spring 2008	PSY487W	487W	Writing in PSY 487	PSY	Psychology	0	Required writing component for PSY 487.	UG	LB	Lab
Spring 2008	PSY488	488	Sem in Special Topics	PSY	Psychology	1	Topics vary.	UG	SE	Seminar
Spring 2008	PSY488W	488W	Writing in PSY 488	PSY	Psychology	0	Required writing component for PSY 488.	UG	LB	Lab
Spring 2008	PSY489	489	Honors Seminar	PSY	Psychology	2	Primarily derived from current honors thesis research. Literature surveys, experimental designs, and special analytical problems presented and discussed by students and faculty. Topics vary.	UG	SE	Seminar
Spring 2008	PSY489W	489W	Writing in PSY 489	PSY	Psychology	0		UG	LB	Lab
Spring 2008	PSY490	490	Ind Reading Select Topics	PSY	Psychology	1	Specific topics selected by students and instructor. Graded pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	PSY498	498	Independent Research	PSY	Psychology	1	Original problems for investigation. Graded pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	PSY499	499	Honors Research Project	PSY	Psychology	1	Original problems for investigation leading to a psychology department honors thesis.	UG	IS	Independent Study
Spring 2008	PSY504	504	Industrial and Org Psych	PSY	Psychology	4	Scientific psychological principles, procedures, and methods applied to human behavior in organizations.	GR	LE	Lecture

Spring 2008	PSY506	506	Engineering Psychology	PSY	Psychology	4	(Also listed as HFE 506.) Introduction to the study of human factors in the design and operation of machine systems.	GR	LE	Lecture
Spring 2008	PSY507	507	Tests and Measurements	PSY	Psychology	4	Introduction to the construction and use of attitude scales, aptitude and ability tests in organizational settings with emphasis on the use of standard tests.	GR	LE	Lecture
Spring 2008	PSY509	509	Psychology of Health Beh	PSY	Psychology	4	The contributions of psychology of health care. Focus is thoeretical and practical, emphasizing the integration of physiological and psychological knowledge.	GR	LE	Lecture
Spring 2008	PSY511	511	Abnormal Psychology	PSY	Psychology	4	An overview of the facts and theories pertaining to abnormal behavior. Topics include classification and diagnosis, causes, and treatment of abnormal behavior. For nonmajors only.	GR	LE	Lecture
Spring 2008	PSY521	521	Cognition & Learning	PSY	Psychology	4	Cognitive processes with emphasis on learning and memory systems. Topics include short-term memory, retrieval mechanisms, conceptual structures and skills tests (IQ), mnemonic techniques, and amnesias.	GR	LE	Lecture
Spring 2008	PSY531	531	Psychology of Personality	PSY	Psychology	4	Survey of contemporary perspectives in personality psychology. Research methods, assessment stragegies, and applications are compared.	GR	LE	Lecture

Spring 2008	PSY541	541	Lifespan Develop Psy	PSY	Psychology	4	Survey of theory, research, and methodoligical issues in the study of development across the life-span.	GR	LE	Lecture
Spring 2008	PSY551	551	Social Psy	PSY	Psychology	4	Current theories and experimental findings regarding the determinants of social behavior.	GR	LE	Lecture
Spring 2008	PSY561	561	Learning & Motivation	PSY	Psychology	4	Introduction to experimental findings and contemporary theories of conditioning, learning, and motivation.	GR	LE	Lecture
Spring 2008	PSY571	571	Perception	PSY	Psychology	4	Study of the active processes by which organisms gather, interpret, and respond to environmental stimuli.	GR	LE	Lecture
Spring 2008	PSY591	591	Behavioral Neuroscience	PSY	Psychology	4	An introduction to the physiological mechanisms of behavior including relationships between the brain, hormones, and behavior. Specific topics may include reproduction, emotion, sleep, learning and memory, schizophrenia, and stress.	GR	LE	Lecture
Spring 2008	PSY592	592	Behavioral Neurosci II	PSY	Psychology	4	Advanced materials on the physiology of behavior. Sensory, motor, ingestive, and cognitive systems, and addictive processes are evaluated in terms of underlying neural and hormonal systems.	GR	LE	Lecture
Spring 2008	PSY601	601	Adv Exp Design: Computer	PSY	Psychology	4	The use of canned computer programs such as SPSS, SAS, and BIOMED in the design, analysis, and interpretation of behaviorally oriented research.	GR	LE	Lecture

Spring 2008	PSY602	602	Adv Design & Quant Analys	PSY	Psychology	4	Use of factorial designs and multivariate tests in psychological research.	GR	LE	Lecture
Spring 2008	PSY611	611	Adv Topics in Abnormal Psy	PSY	Psychology	4	Theories and research relating to causes, symptoms, and influence of abnormal behavior.	GR	LE	Lecture
Spring 2008	PSY619	619	Adv Tpcs Physiological Psy	PSY	Psychology	4	(Also listed as BMS 910.) Detailed examination of selected areas in cognition and learning.	GR	LE	Lecture
Spring 2008	PSY621	621	Adv Tpcs in Cognition & L	PSY	Psychology	4	Detailed examination of selected areas in cognition and learning.	GR	LE	Lecture
Spring 2008	PSY625	625	Human-Computer Interface	PSY	Psychology	4	Examination of critical factors (nature of tasks to be performed, human capabilities/limitations) in the design of effective computer interfaces.	GR	LE	Lecture
Spring 2008	PSY631	631	Adv Topics in Per	PSY	Psychology	4	Examination of selected topics in personality, including theory, research, and application.	GR	LE	Lecture
Spring 2008	PSY632	632	Practicum:Applied Psy	PSY	Psychology	4	Provides an opportunity to work in an applied psychological setting under supervision. The setting will be consistent with the individual student's interests (mental health agency, industrial or organizational setting, etc.).	GR	LE	Lecture

Spring 2008	PSY633	633	Develop Psychpathology	PSY	Psychology	4	Survey of theoretical approaches to the description and explanation of childhood psychopathology, overview of current research in childhood psychopathology, and description of methodological problems involved in clinical research with children.	GR	LE	Lecture
Spring 2008	PSY639	639	Theory & Res Clinical Psy	PSY	Psychology	4	Overview of contemporary clinical approaches, research techniques, and empirical data.	GR	LE	Lecture
Spring 2008	PSY641	641	Advanced Topics in Dev Psy	PSY	Psychology	4	Review of current theory, research, and applied issues in selected aspects of development across the lifespan.	GR	LE	Lecture
Spring 2008	PSY643	643	Psychometrics	PSY	Psychology	4	Measurement theory and its application to test development including concepts of reliability, validity, discriminatin, and prediction.	GR	LE	Lecture
Spring 2008	PSY644	644	Advanced Topics in I/O Psy	PSY	Psychology	4	Theories and research findings in selected topics in industrial psychology.	GR	LE	Lecture
Spring 2008	PSY647	647	Psychology of Aging	PSY	Psychology	4	Overview of the theories, methods and research related to human aging. Focus on both current research and application from psychology.	GR	LE	Lecture
Spring 2008	PSY651	651	Adv Topics in Soc Psy	PSY	Psychology	4	Detailed examination of selected areas of current research in social psychology.	GR	LE	Lecture

Spring 2008	PSY655	655	Psycholinguistics	PSY	Psychology	4	Experimental findings in the areas of animal communication and human language with emphasis on their implications for current theories of language. Includes production and reception of speech, acoustic signal, speech mechanism, personality and speech behavior, development and deficiencies, and communication.	GR	LE	Lecture
Spring 2008	PSY661	661	Adv Tpcs in Cond Lrng	PSY	Psychology	4	Continued study of conditioning, learning, and motivation.	GR	LE	Lecture
Spring 2008	PSY665	665	Information Processing	PSY	Psychology	4	Also listed as BMS 905). Study of cognitive skills (e.g., attention) and the scientific paradigms used in their investigation.	GR	LE	Lecture
Spring 2008	PSY671	671	Adv Tpcs in Perception	PSY	Psychology	4	Emphasis on modern controversial issues and theories.	GR	LE	Lecture
Spring 2008	PSY675	675	Signal Detection Theory	PSY	Psychology	4	Presents signal detection theory in the context of Thurstonian scaling and statistical decision theory. Studies the application of signal detection theory in various areas of psychology including psychophysics, memory, physiology, and psycholinguistics.	GR	LE	Lecture
Spring 2008	PSY678	678	Animal Behavior	PSY	Psychology	4	Physiology, phylogeny, and ontogeny of behavior.	GR	LE	Lecture

Spring 2008	PSY681	681	Hst of Psychology	PSY	Psychology	4	Major trends in the development of psychology from its beginning to the present.	GR	LE	Lecture
Spring 2008	PSY688	688	Sem in Special Topics	PSY	Psychology	1	Topics vary.	GR	SE	Seminar
Spring 2008	PSY690	690	Ind Reading Select Topics	PSY	Psychology	1		GR	IS	Independent Study
Spring 2008	PSY698	698	Independent Research	PSY	Psychology	1	Original problems for investigation.	GR	IS	Independent Study
Spring 2008	PSY700	700	Prin Instruction in Psy	PSY	Psychology	4	Survey of available instructional material and discussion of educational theory and techniques leading to more effective instruction. For psychology majors only. Department permission required. Graded pass/unsatisfactory.	GR	LE	Lecture

Spring 2008	PSY701	701	Dsgn & Quant	PSY	Psychology	4	The foundation of experimental design and quantitative techniques will be developed. Students are expected to understand assumptions underlying each technique or procedure. They must also understand their applications to experimental and field research and to experimental and quasi-experimental designs. Both complex analyses of variance, multiple regression and non-parametric techniques will be covered. Computation and computer skills must be mastered. First year research projects and their design and analysis will be reviewed.	GR	LE	Lecture
Spring 2008	PSY702	702	Dsgn & Quant:ANOVA	PSY	Psychology	4	Continuation of PSY 701.	GR	LE	Lecture
Spring 2008	PSY703	703	Dsgn & Quant: Mltpl Reg	PSY	Psychology	4	Issues in multiple regression are reviewed using statistical software programs. These issues include bivariate regression, continuous and categorical predictors, interaction effects, and statistical power.	GR	LE	Lecture

Spring 2008	PSY707	707	Multivariate Meth Psy	PSY	Psychology	4	Issues in multivariate analysis are reviewed using statistical software programs. These issues include path analysis, principle components analysis, confirmatory factor analysis, and structural regression models.	GR	LE	Lecture
Spring 2008	PSY717	717	Molecular Biol Memory	PSY	Psychology	3	Modern molecular biological investigations of the process of learning and memory. Implications for the development of a molecular theory of memory processes are considered.	GR	LE	Lecture
Spring 2008	PSY721	721	Engineering Psychology	PSY	Psychology	4	A survey of psychological principles and methods pertinent to issues of human-machine interactions. It is emphasized that basic and applied research inform each other and are both necessary for advancing the field.	GR	LE	Lecture
Spring 2008	PSY724	724	Human Factors in Sys	PSY	Psychology	4	The role of human factors in system design is examined from a cognitive systems engineering perspective. The analytic tools of CSE are explored and applied in design projects.	GR	LE	Lecture
Spring 2008	PSY725	725	Exp Meth in Soc Psy	PSY	Psychology	4	The experimental method as it is applied to social psychological problems. Provides experiences in both laboratory and field techniques.	GR	LE	Lecture

Spring 2008	PSY726	726	Attitude Struct & Change	PSY	Psychology	4	Attitude as a social psychological concept, including problems of measurement, empirical findings, and theoretical models.	GR	LE	Lecture
Spring 2008	PSY727	727	Small Groups	PSY	Psychology	4	Current theory and research in selected areas of small groups, including communications, group norms and conformity, group structure, and leadership.	GR	LE	Lecture
Spring 2008	PSY729	729	Interpersonal Relations	PSY	Psychology	4	Current theory and research in selected areas of small groups, including communications, group norms and conformity, group structure, and leadership.	GR	LE	Lecture
Spring 2008	PSY731	731	Adv Theories Personality	PSY	Psychology	4	Contemporary theories of the development, organization, and dynamics of personality.	GR	LE	Lecture
Spring 2008	PSY732	732	Personality Structure	PSY	Psychology	4	The major approaches for describing personality structure will be discussed and the results of factor analytic studies will be summarized. Implications of personality structure for behavior will be explored and the interactionist model will be described and evaluated. Relevant data on individual differences and tests will be summarized and evaluated. Consistency of differences across situations as well as application of results will be discussed.	GR	LE	Lecture

Spring 2008	PSY733	733	Community Psychology	PSY	Psychology	4	Seminar on policy formulation and programming for community-oriented approaches to mental health problems. Covers history, policy, and program development difficulties; social problems versus illness models of psychopathology and treatment, and preventive interventions.	GR	LE	Lecture
Spring 2008	PSY735	735	Sys Analy & Organiz Chang	PSY	Psychology	4	Overview of the systems approach to organizational diagnosis, planning, and intervention in human service organizations. Behavioral interventions are emphasized.	GR	LE	Lecture
Spring 2008	PSY740	740	Indust/Org Psych	PSY	Psychology	4	Provides an overview of the major topics in industrial/organizational psychology. Traditional as well as developing topics are surveyed.	GR	SE	Seminar
Spring 2008	PSY741	741	Personnel Selection	PSY	Psychology	4	In-depth review of the psychological basis of personnel selection including recruitment techniques, criterion development, performance evaluation, validity generalization, and instruments. Theoretical, practical, and legal issues are covered.	GR	LE	Lecture

Spring 2008	PSY742	742	Organizational Behavior	PSY	Psychology	4	Review of behavior in organizations within a framework of psychological theory and research. Topics include socialization, careers, organizational design, and leadership.	GR	LE	Lecture
Spring 2008	PSY743	743	Psychology of Leadership	PSY	Psychology	4	Designed to explore the theories, research, and practice of leadership in work organizations from a psychological perspective.	GR	LE	Lecture
Spring 2008	PSY745	745	Res Methods I/O Psy	PSY	Psychology	4	The course focuses on the unique methodological challenges faced by I/O researchers. The empirical problems that the complex nature of organizations and their uncontrollable environments pose for researchers are discussed. Theory, causation, and experimental validity are reviewed. Various research designs (e.g., true experiments, quasi-experiments, correlation and regression analysis, ethnographic study) are presented and scrutinized. Methods of data collection (e.g., unobtrusive measurement, survey, qualitative) are reviewed. Meta-analysis as a research method is discussed.	GR	LE	Lecture

Spring 2008	PSY751	751	Prosmnr Human Factors Psy	PSY	Psychology	4	In-depth review of major areas of human factors research. The areas reviewed in this course complement those areas reviewed in PSY 752.	GR	SE	Seminar
Spring 2008	PSY752	752	Prosmnr Human Factors Psy	PSY	Psychology	4	In-depth review of major areas of human factors research. The areas reviewed in this course complement those areas reviewed in PSY 751.	GR	SE	Seminar
Spring 2008	PSY753	753	Grp Process & Soc Beh	PSY	Psychology	4	Theories and data on social behavior will be reviewed. Topics will include attitude and attitude change, social perception, prejudice, and group decision-making. Possible applications will be discussed.	GR	LE	Lecture
Spring 2008	PSY759	759	Seminar in Human Factors	PSY	Psychology	0	Weekly discussions of topics in Human Factors.	GR	SE	Seminar
Spring 2008	PSY761	761	Human Lrng & Memory	PSY	Psychology	4	Phenomena, principles, and problems of learning and retention.	GR	LE	Lecture
Spring 2008	PSY762	762	Advanced Learning	PSY	Psychology	4	Experimental findings in animal and human learning with emphasis on their implications for current theories in learning.	GR	LE	Lecture
Spring 2008	PSY763	763	Advanced Motivation	PSY	Psychology	4	Experimental findings in animal and human motivation with emphasis on their implications for current theories of motivation.	GR	LE	Lecture

Spring 2008	PSY771	771	Perception	PSY	Psychology	4	Selected problems in perception with emphasis on theoretical interpretations.	GR	LE	Lecture
Spring 2008	PSY773	773	Sensory Processes	PSY	Psychology	4	The basic physiology of the senses and the peripheral nervous system. Emphasis on receptor mechanisms and neural coding processes.	GR	LE	Lecture
Spring 2008	PSY775	775	Neuropsychology	PSY	Psychology	4	Intensive laboratory involvement with the instrumentation and surgical techniques used in physiological psychology including: GSR, EMG, EKG, and EEG recordings; animal behavioral changes produced by electrical stimulation of the brain and/or lesions of brain structures.	GR	LE	Lecture
Spring 2008	PSY776	776	Visual Science	PSY	Psychology	4	Study of visual systems including psychophysical measurement, temporal and spatial properties, display criteria, colorimetry, and visual system modeling.	GR	LE	Lecture
Spring 2008	PSY778	778	Cortical Visual Processes	PSY	Psychology	4	In-depth consideration of visual processes that originate in the cerebral cortex. Topics include binocular vision, motion perception, eye movements, and the application of these to human factors research.	GR	LE	Lecture

Spring 2008	PSY782	782	Instrumentation in Psy	PSY	Psychology	4	Review of instrumentation used in psychological research and applications-relevant microprocessor and analog devices will be described. Topics will include displays, timing, transducers, A/D/A, amplifiers, and logical control. Students will construct and modify devices.	GR	LE	Lecture
Spring 2008	PSY784	784	Professional Issues	PSY	Psychology	1	Seminar in which professional issues and ethics are discussed.	GR	SE	Seminar
Spring 2008	PSY785	785	Intermediate Statistics	PSY	Psychology	4	Statistical methods and interpretations encountered in experimental studies and presentations of behavioral data.	GR	LE	Lecture
Spring 2008	PSY789	789	Continuing Registration	PSY	Psychology	1		GR	IS	Independent Study
Spring 2008	PSY790	790	Independent Research	PSY	Psychology	1	Research conducted under faculty supervision.	GR	IS	Independent Study
Spring 2008	PSY797	797	Internship	PSY	Psychology	1	Internship in private or governmental organizations under the direction of a faculty advisor. Does not count for graduate credit toward the M.S. or Ph.D. degree in psychology. Graded pass/unsatisfactory.	GR	IN	Internship
Spring 2008	PSY799	799	Thesis Research	PSY	Psychology	1	Research conducted for the M.S. thesis. Research must be approved by supervisory committee, submitted in writing and defended by public oral examination.	GR	IS	Independent Study

Spring 2008	PSY823	823	Display Design	PSY	Psychology	4	Principles and techniques of visual display design are discussed from the cognitive systems engineering perspective.	GR	LE	Lecture
Spring 2008	PSY825	825	Aviation Psychology	PSY	Psychology	4	The application of psychological principles and methods in the avaiation doamin. The focus is on the dynamic pilot-cockpit interface, its cognitive processing demand, and implications for designs of technological support.	GR	LE	Lecture
Spring 2008	PSY841	841	Applied Develop Psych	PSY	Psychology	4	Reviews age changes in sensation, perception, learning, and cognition. Focuses on domains including medical and consumer products, driving and skilled activities, and architecture. Research techniques include field observations and cognitive task analysis.	GR	LE	Lecture
Spring 2008	PSY842	842	Work Motivation	PSY	Psychology	4	Work motivation theories are examined in terms of their empirical support and practical usefulness. Goals and the setting of objectives by employees are discussed. The design of work is discussed.	GR	LE	Lecture

Spring 2008	PSY845	845	Organizational Theory	PSY	Psychology	4	The structuring of organizations is discussed in terms of centralization, formalization, and complexity. Issues of division of labor, span of control and departmentalization and delegation are examined. Mechanistic versus organic models of organizational design are compared and contrasted. The role technology plays in design is addressed. The environment's impact on organizational design is examined including uncertainty, information processing and adaptation. Matrix designs are evaluated in terms of their efficiency and flexibility.	GR	LE	Lecture

Spring 2008	PSY862	862	Instructional Systems	PSY	Psychology	4	Advances in computer science and artificial intelligence have provided us with the potential to develop instructional systems that are capable of improving the effectiveness of training. The modules that comprise an instructional system (expert diagnosis, instructional, and environmental modules) are discussed. Theories of information processing, learning, and memory that can be used to guide the development of these systems are also discussed. Evaluation of training programs are analyzed in depth.	GR	LE	Lecture
Spring 2008	PSY864	864	Cognitive Modeling	PSY	Psychology	4	Review of computer models for cognitive processing, including propositional and connectionist approaches. Development and evaluation of mathematical models.	GR	LE	Lecture
Spring 2008	PSY873	873	Vestibular Function	PSY	Psychology	4	Role of vestibular organs in space orientation. Stimulus parameters, anatomy, neurophysiology, psychophysics, perception, performance, and motor responses are examined with special reference to aerospace vehicles.	GR	LE	Lecture

Spring 2008	PSY875	875	Psychoacoustics	PSY	Psychology	4	Advanced examination of auditory psychophysics and perceptual processes involving consideration of peripheral and central auditory physiology whenever possible.	GR	LE	Lecture
Spring 2008	PSY881	881	History & Systems in Psy	PSY	Psychology	4	A review of the history of psychology that explores the major trends in the development of the field. The relation of modern psychology to its antecedents will be explored.	GR	LE	Lecture
Spring 2008	PSY886	886	Topics in Human Factors	PSY	Psychology	1	Seminars with in-depth coverage of special topics in human factors. Topics vary. Permission of Instructor. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	PSY888	888	Topics in Indus/Organiz	PSY	Psychology	1	Seminars with in-depth coverage of special topics in industrial or organizational psychology. Topics vary. Permission of Instructor. May be taken for a letter grade or pass/unsatisfactory.	GR	SE	Seminar
Spring 2008	PSY891	891	Behavioral Neuroscience	PSY	Psychology	4	(Also listed as BMS 914.) Coverage of the neurobiological basis of behavior. Focuses on motor function, ingestion, mating, learning, memory, rhythmical influences, and emotion.	GR	LE	Lecture

Spring 2008	PSY894	894	Egr Psychophysiology	PSY	Psychology	4	The application of psychophysiological measures to problems in engineering psychology will be addressed. Electroencephalographic, oculomotor, cardiovascular and respiratory measures will be reviewed. Relationship to workload, attention, circadian rhythms, stress, and display design will be explored.	GR	LE	Lecture
Spring 2008	PSY968	968	Man Control & Motor Skill	PSY	Psychology	4	Description of human control processes and their models. Analyses of human skills and skill typology.	GR	LE	Lecture
Spring 2008	PSY991	991	Psychobiology of Stress	PSY	Psychology	4	The effects of psychological stress on neuroendocrine and other physiological systems are explored. The implications of these relationships for disease processes and human performance are discussed.	GR	LE	Lecture
Spring 2008	PSY999	999	Dissertation Research	PSY	Psychology	1	Original research of a quality that is publishable in refereed journals. Research must be acceptable to the supervisory committee, submitted in writing and defended by public oral examination.	GR	IS	Independent Study
Spring 2008	PTH601	601	Autopsy Pathology	PTH	Pathology	2		MD	CL	Clinical
Spring 2008	PTH603	603	Clin Lab Hematology	PTH	Pathology	2		MD	CL	Clinical
Spring 2008	PTH605	605	Hospital-Based Pathology	PTH	Pathology	2		MD	CL	Clinical
Spring 2008	PTH606	606	Forensic Pathology	PTH	Pathology	2		MD	CL	Clinical

Spring 2008	PTH800	800	Student-Initiated Elective	PTH	Pathology	4		MD	CL	Clinical
Spring 2008	PTH801	801	Hospital Pathology	PTH	Pathology	8		MD	CL	Clinical
Spring 2008	PTH803	803	Pediatric Pathology	PTH	Pathology	8		MD	CL	Clinical
Spring 2008	PTH804	804	Overview: Hosp-Based Path	PTH	Pathology	8		MD	CL	Clinical
Spring 2008	PTH805	805	Trauma Autopsy Patholgy	PTH	Pathology	8		MD	CL	Clinical
Spring 2008	PTH806	806	F-N Aspiration Cytology	PTH	Pathology	8		MD	CL	Clinical
Spring 2008	PTH807	807	FNA Cytology: Thyroid	PTH	Pathology	4		MD	CL	Clinical
Spring 2008	PTH900	900	Extramural	PTH	Pathology	4		MD	H	Hospital
Spring 2008	PTX700	700	Research Techniques	PTX	Pharmacology/Toxicology	3	Practical laboratory experiences in commonly used biological techniques including DNA purification and manipulation, protein expression and analysis, and the classical pharmacological techniques of mediating receptor binding. Designed to give hands-on experience along with a short weekly lecture providing background on the theory behind the topic.	GR	LE	Lecture

Spring 2008	PTX710	710	Principles of Biokinetics	PTX	Pharmacology/Toxicology	4	This course will introduce the basic principles that govern the bio-availabilty/activity of drugs and toxants in an organism with the focus on humans.	GR	LE	Lecture
Spring 2008	PTX750	750	Principles of Biodynamics	PTX	Pharmacology/Toxicology	4	This course will introduce the basic principles that govern the dynamics of drugs and toxants in an organism with the focus on humans.	GR	LE	Lecture
Spring 2008	PTX751	751	Molecular Toxicology	PTX	Pharmacology/Toxicology	4	Modern toxicology focuses on understanding the mechanism of action of chemicals at the molecular level. This course will explore a spectrum of molecular mechanisms of toxicity providing a broad perspective of the cutting edge of research in toxicology.	GR	LE	Lecture
Spring 2008	PTX770	770	Medical Chemical Defense	PTX	Pharmacology/Toxicology	3	This course will provide a in depth understanding of chemical warfare threat agents and medical intervention. It will also introduce requirements for government and contract research standards for study design, development and execution.	GR	LE	Lecture

Spring 2008	PTX771	771	Medical Biological Defense	PTX	Pharmacology/Toxicology	3	This course will provide an in depth understanding of biological warfare threat agent pathogenesis, toxicology, and medical intervention. The course will also introduce requirements for Government and Contract Research standards for working with highly pathogenic microorganisms, study design, development, and execution to include issues with regard to Good Laboratory Practices, Institutional Animal Care and Use Committee, Quality Assurance, and safety pharmacology.	GR	LE	Lecture
Spring 2008	PTX990	990	PTX Seminar/Journal Club	PTX	Pharmacology/Toxicology	1	Guest speakers, students, WSU faculty present research results and current topics form literature.	GR	SE	Seminar
Spring 2008	PYC600	600	Student Initiated Elective	PYC	Psychiatry	2		MD	LE	Lecture
Spring 2008	PYC602	602	Intro Child Adolescent	PYC	Psychiatry	2		MD	CL	Clinical
Spring 2008	PYC700	700	Psychiatry Clerkship	PYC	Psychiatry	11		MD	CL	Clinical
Spring 2008	PYC800	800	Student-Initiated Elective	PYC	Psychiatry	4		MD	CL	Clinical
Spring 2008	PYC801	801	Consult/Liaison Psychiatry	PYC	Psychiatry	8		MD	CL	Clinical
Spring 2008	PYC803	803	O-P Child/Adolescent Psych	PYC	Psychiatry	8		MD	CL	Clinical

Spring 2008	PYC808	808	Consultation/Liaison Psych	PYC	Psychiatry	8		MD	CL	Clinical
Spring 2008	PYC809	809	Community Psychiatry	PYC	Psychiatry	8		MD	CL	Clinical
Spring 2008	PYC810	810	Acting Internship Psychiatry	PYC	Psychiatry	8		MD	CL	Clinical
Spring 2008	PYC811	811	Care of Severely Mentally Ill	PYC	Psychiatry	8		MD	CL	Clinical
Spring 2008	PYC812	812	Intro Psychotherapy	PYC	Psychiatry	8		MD	CL	Clinical
Spring 2008	PYC813	813	Mental Retardation/DD	PYC	Psychiatry	8		MD	CL	Clinical
Spring 2008	PYC814	814	Addiction Psychiatry	PYC	Psychiatry	8		MD	CL	Clinical
Spring 2008	PYC815	815	Systems-Based Psychiatry	PYC	Psychiatry	8		MD	CL	Clinical
Spring 2008	PYC900	900	Extramural	PYC	Psychiatry	4		MD	H	Hospital
Spring 2008	RAD800	800	Student-Initiated Elective	RAD	Radiology	4		MD	CL	Clinical
Spring 2008	RAD803	803	Medical Imaging	RAD	Radiology	8		MD	CL	Clinical
Spring 2008	RAD900	900	Extramural	RAD	Radiology	4		MD	H	Hospital

Spring 2008	REL204	204	Great Books:Bible & Wstrn Cult	REL	Religion	4	Study of selected Biblical writings viewed in their original cultural contexts and chosen to reflect the varieties of Biblical literature, the Bible's relationship to various societies, and its role in the development of Western culture.	UG	LE	Lecture
Spring 2008	REL204W	204W	Writing in REL 204	REL	Religion	0	Required writing component for REL 204.	UG	LB	Lab
Spring 2008	REL205	205	What is Religion?	REL	Religion	4	Explores the question of the meaning of religion by looking at various ways in which people experience and express it. Diverse examples of religion and religious life are considered.	UG	LE	Lecture
Spring 2008	REL206	206	Eastern Religions	REL	Religion	4	General introduction to the major religious traditions of South Asia and East Asia: Hinduism, Buddhism, Confucianism, Taoism, and Shintoism.	UG	LE	Lecture
Spring 2008	REL207	207	Western Religions	REL	Religion	4	General introduction to the major religious traditions of Judaism, Christianity, Islam, and other selected religious traditions.	UG	LE	Lecture
Spring 2008	REL208	208	Contemporary Issues in Rel	REL	Religion	3	Study of selected problems, ideas, and religious developments that have become important in contemporary society.	UG	LE	Lecture
Spring 2008	REL220	220	Hebrew Scripture(Old Test)	REL	Religion	3	Introduction to the literature, history, and religion of ancient Israel.	UG	LE	Lecture

Spring 2008	REL221	221	Between the Testaments	REL	Religion	3	Introduction to the literature and religion in Jewish sects from the Exile (ca. 500 B.C.E.) to the Mishnah of Judah the Prince (200 C.E.), including the Dead Sea Scrolls.	UG	LE	Lecture
Spring 2008	REL222	222	Lit & Rel of New Testament	REL	Religion	3	Introduction to the literature, history, and religion of early Christianity.	UG	LE	Lecture
Spring 2008	REL231	231	Religion & the Amer Experience	REL	Religion	3	Survey of different religions in the United States with attention to the growth of a distinctive form of religion shaped by the American experience.	UG	LE	Lecture
Spring 2008	REL235	235	Afro-American Religious Exp	REL	Religion	3	Survey of the black American religious experience from the colonial era to the present. Examines what black American religion is and the role it plays in the sociopolitical life of Afro-Americans.	UG	LE	Lecture
Spring 2008	REL245	245	World Religions	REL	Religion	3	Comparative study of the role of religion in cultures and societies on the international scene.	UG	LE	Lecture
Spring 2008	REL246	246	African Religion	REL	Religion	3	Focuses on the religious concepts and practices of premodern African tradition.	UG	LE	Lecture
Spring 2008	REL270	270	Approaches to Religious Ethics	REL	Religion	3	Examination of various religious ethical systems from diverse cultural situations.	UG	LE	Lecture

Spring 2008	REL280	280	Phl of Religion:Faith & Reason	REL	Religion	3	(Also listed as PHL 280.) Selected cross-disciplinary issues arising from philosophy and religion; Judeo-Christian concept of God, grounds for belief and disbelief, revelation and faith, religious language, verification, immortality and resurrection, and karma and reincarnation. Issues are discussed on the basis of selected texts on faith and reason.	UG	LE	Lecture
Spring 2008	REL281	281	Phl of Rel:Contemp West Survey	REL	Religion	3	(Also listed as PHL 281.) Cross-disciplinary perspective on philosophical and religious schools of thought in the early 20th century. Absolute and personal idealism, spirit, value, positivism and naturalism, history and culture, modernism and pragmatism, religious consciousness, and phenomenology.	UG	LE	Lecture
Spring 2008	REL290	290	Current Problems	REL	Religion	3	Investigation and discussion of a single current problem in the field of religion.	UG	LE	Lecture
Spring 2008	REL300	300	Religion in America	REL	Religion	4	Concentrates on specific segments of American religious life. Focuses on one or more distinctive religious groups or movements in the context of American history and culture.	UG	LE	Lecture

Spring 2008	REL310	310	Early & Medieval West Rel Thgt	REL	Religion	4	Survey of important themes in religious thought of the major Western traditions. Selected readings from primary sources and secondary interpretations.	UG	LE	Lecture
Spring 2008	REL311	311	Reformation & Mod West Rel Tht	REL	Religion	4	Survey of important themes in the religious thought of the major Western traditions. Selected readings from primary sources and secondary interpretations.	UG	LE	Lecture
Spring 2008	REL315	315	Christianity	REL	Religion	4	Examination of the structures of religious experience that have shaped the development of Christianity in history. Institutional and ritual forms are investigated as systems of meaning against the backdrop of the general history of religions.	UG	LE	Lecture
Spring 2008	REL316	316	Judaism: Faith & People	REL	Religion	4	Examination of Judaism as a religious faith and people, with special reference to formative historical, social, ethnic, and cultural factors.	UG	LE	Lecture
Spring 2008	REL318	318	Contemporary Jewish Thought	REL	Religion	4	Examination of the major themes and issues in the works of contemporary Jewish thinkers (e.g., Borowitz, Herberg, Fackenheim, Kaplan, Rothschild, Heschel, Rubenstein, and Weisel).	UG	LE	Lecture
Spring 2008	REL321	321	Religions in Biblical Period	REL	Religion	4	Examination of selected religious movements and/or problems in the Biblical period, and their interconnectedness and mutual influences.	UG	LE	Lecture

Spring 2008	REL322	322	Topics in Biblical Literature	REL	Religion	4	Examination of selected aspects of Biblical literature from both literary and historical perspectives to explore the possible structures, functions, and meanings of this literature for its original community.	UG	LE	Lecture
Spring 2008	REL322W	322W	Writing in REL 322	REL	Religion	0		UG	LB	Lab
Spring 2008	REL330	330	Topics in American Religion	REL	Religion	4	Examination of selected topics in American religion to investigate its basic religious structures and to explore the relationship of religious phenomena to their cultural context.	UG	LE	Lecture
Spring 2008	REL330W	330W	Writing in REL 330	REL	Religion	0		UG	LB	Lab
Spring 2008	REL331	331	New Religious Movemnts in Amer	REL	Religion	4	Considers a variety of new religious movements in America, including Shakers, Mormons, Seventh-Day Adventists, and Jehovah's Witnesses.	UG	LE	Lecture
Spring 2008	REL332	332	Women & Religion in America	REL	Religion	4	General examination of the role women have played in American religious history, with special reference to the diversity of women's religious experiences.	UG	LE	Lecture
Spring 2008	REL340	340	Topics in Asian Religion	REL	Religion	4	Studies in the religious dimension of Asian cultures with attention to historical, social, and aesthetic perspectives.	UG	LE	Lecture

Spring 2008	REL341	341	Islam	REL	Religion	4	Study of the origin and development of Islam including contemporary issues and problems.	UG	LE	Lecture
Spring 2008	REL341W	341W	Writing in REL 341	REL	Religion	0		UG	LB	Lab
Spring 2008	REL344	344	Religion in Japanese Life	REL	Religion	3	Examination of the role of religion in Japanese culture and society with attention to both historical development and current issues.	UG	LE	Lecture
Spring 2008	REL357	357	Understanding Death	REL	Religion	4	Basic issues in death and dying using resources from human sciences and humanities in religious perspective.	UG	LE	Lecture
Spring 2008	REL361	361	Religion and Society	REL	Religion	4	(Also listed as SOC 361.) General treatment of religion as a social institution, examining the influence of religious ideas and organizations on other social institutions and the influence of society on religion.	UG	LE	Lecture
Spring 2008	REL362	362	Anthropology of Religion	REL	Religion	4	(Also listed as ATH 346.) Anthropological approach to the meaning and function of religion in social life and the nature of the thought or belief systems that gave rise to different forms of religious life; emphasis on primitive and peasant societies.	UG	LE	Lecture
Spring 2008	REL363	363	Religion and Psychology	REL	Religion	4	Introduction to selected themes, issues, and problems in the interaction of religion and psychology. Differing points of view are considered.	UG	LE	Lecture

Spring 2008	REL365	365	Religion & Politics in America	REL	Religion	4	(Also listed as PLS 315.) General examination of both the historical and the contemporary relation between religion and politics in the United States, with special reference to church/state separation	UG	LE	Lecture
Spring 2008	REL370	370	Studies in Ethics:	REL	Religion	4	Special topics for intensified study of the ethical dimensions of a particular religious tradition or for concentrated study in theoretical or practical ethical problems. Topics vary.	UG	LE	Lecture
Spring 2008	REL370W	370W	Writing in REL	REL	Religion	0		UG	LB	Lab
Spring 2008	REL371	371	Business Ethics	REL	Religion	4	(Also listed as PHL 371.) Case studies and discussion of ethical issues involved in business transactions and management.	UG	LE	Lecture
Spring 2008	REL378	378	Ethics and Medicine	REL	Religion	4	(Also listed as PHL 378.) Examination of ethical issues confronting society in areas of medicine and health care, from perspective of philosophical and theological ethics. Examples include ethics of abortion, euthanasia, experimental medicine, and behavior control.	UG	LE	Lecture
Spring 2008	REL378W	378W	Writing in REL 378	REL	Religion	0		UG	LB	Lab

Spring 2008	REL382	382	Philosophy of Religion:Process	REL	Religion	4	Also listed as PHL 382.) Realism and the revolt against idealism. Cross-disciplinary analysis of major contemporary philosophers and the implications of their thoughts for religion. Focus on Alfred North Whitehead.	UG	LE	Lecture
Spring 2008	REL383	383	Philosophy of Religion:Secular	REL	Religion	4	(Also listed as PHL 383.) Cross-disciplinary analysis of modes of human awareness through which religious meaning is expressed (sensation, morality, beauty, reason, and human relations). Examination of presuppositions of contemporary secular religion in existentialism.	UG	LE	Lecture
Spring 2008	REL390	390	Studies in Selected Subjects	REL	Religion	4	Problems, approaches, and topics in the field of religion. Topics vary.	UG	LE	Lecture
Spring 2008	REL390W	390W	Writing in REL 390	REL	Religion	0	Required writing component for REL 390.	UG	LB	Lab
Spring 2008	REL394	394	Existentialism	REL	Religion	4	(Also listed as PHL 394.) Representative writers of the existentialist movement.	UG	LE	Lecture
Spring 2008	REL431	431	Religion in American Life	REL	Religion	4	Development of religious thought and institutional life in the United States viewed in relationship to American social change.	UG	LE	Lecture
Spring 2008	REL435	435	Black Amer Religious Thought	REL	Religion	4	Analysis of black American religious thought through critical study of the writings of selected figures who have helped shape black religion from 1780 to the present.	UG	LE	Lecture

Spring 2008	REL443	443	Asian Religious Philosophy	REL	Religion	4	(Also listed as PHL 443.) Perennial themes in Asian cultures (such as individual, society, and cosmos; appearance and reality; time and history; karma, freedom, and responsibility) as they have been treated in the philosophical traditions of these cultures.	UG	LE	Lecture
Spring 2008	REL456	456	Religious Themes in Literature	REL	Religion	4	(Also listed as ENG 460.) Provides intensive study of literary works in terms of significant and recurring religious themes and images as they can be traced in various cultures and literary traditions.	UG	LE	Lecture
Spring 2008	REL479	479	Ethics in Industrial Society	REL	Religion	3	Ethical responsibilities of business in light of political, moral, social, and religious considerations. Emphasis on analysis and evaluation of the changing framework of responsibilities facing both business organizations and their leaders.	UG	LE	Lecture
Spring 2008	REL487	487	Evolution,Religion & Ethics	REL	Religion	4	(Also listed as BIO 417.) Introduction to the biological, philosophical, theological, and ethical aspects of evolution.	UG	LE	Lecture
Spring 2008	REL490	490	Independent Reading	REL	Religion	1		UG	IS	Independent Study
Spring 2008	REL493	493	Seminar in Religion	REL	Religion	4	Topics vary.	UG	SE	Seminar
Spring 2008	REL493W	493W	Writing in Religion	REL	Religion	0		UG	LB	Lab

Spring 2008	REL494	494	Undergrad Research in Religion	REL	Religion	1	Intensive consideration of problems and issues in a given area of religious study; topics determined in consultation between students and department. Graded pass/unsatisfactory at discretion of department.	UG	IS	Independent Study
Spring 2008	REL497	497	Senior Project	REL	Religion	4	Guided research culminating in a major paper on a topic chosen by the student and the instructor. Students develop a comprehensive bibliography, prepare a detailed outline, and write and revise the final project.	UG	IS	Independent Study
Spring 2008	REL498	498	Workshop	REL	Religion	3	Intensive study of selected problems (e.g., the teaching of religion in the secondary school, medical ethics) to meet particular needs of participating students. Topics vary.	UG	LE	Lecture
Spring 2008	REL510	510	Early & Medieval West Rel Thgt	REL	Religion	4	Survey of important themes in the religious thought of the major Western traditions. Selected readings from primary sources and secondary interpretations.	GR	LE	Lecture
Spring 2008	REL511	511	Reformation & Mod West Rel Tht	REL	Religion	4	Survey of important themes in the religious thought of the major Western traditions. Selected readings from primary sources and secondary interpretations.	GR	LE	Lecture

Spring 2008	REL515	515	Christianity	REL	Religion	4	An examination of the structures of religious experience which have shaped the development of Christianity in history. Institutional and ritual forms will be investigated as systems of meaning against the backdrop of the general history of religions.	GR	LE	Lecture
Spring 2008	REL516	516	Judaism: Faith and People	REL	Religion	4	Judaism as a religious culture of a particular people is examined critically, historically and phenomenologically.	GR	LE	Lecture
Spring 2008	REL518	518	Contemporary Jewish Thought	REL	Religion	4	Examination of the major themes and issues in the works of contemporary Jewish thinkers, e.g., Borowitz, Herberg, Fackenheim, Kaplan, Rothschild, Heschel, Rubenstein and Wiessel.	GR	LE	Lecture
Spring 2008	REL521	521	Religions in Biblical Period	REL	Religion	4	Examination of selected religious movements and/or problems in the Biblical period and their interconnectedness and mutual influences.	GR	LE	Lecture
Spring 2008	REL522	522	Topics in Biblical Literature	REL	Religion	4	Examination of selected aspects of Biblical literature from both literary and historical perspectives to explore the possible structures, functions, and meanings of this literature for its original community.	GR	LE	Lecture

Spring 2008	REL530	530	Topics in American Religion	REL	Religion	4	Examination of selected topics in American religion to investigate basic religious structures and to explore the relationship of religious phenomena to their cultural context.	GR	LE	Lecture
Spring 2008	REL540	540	Topics in Asian Religion	REL	Religion	4	Studies in the religious dimension of Asian cultures, with emphasis on historical, social, and aesthetic perspectives.	GR	LE	Lecture
Spring 2008	REL544	544	Religion in Japanese Life	REL	Religion	3	Examination of the role of religion in Japanese culture and society with attention to both historical development and current issues.	GR	LE	Lecture
Spring 2008	REL557	557	Understanding Death	REL	Religion	4	Basic issues in death and dying using resources from human sciences and humanities in a religious perspective.	GR	LE	Lecture
Spring 2008	REL561	561	Religion and Society	REL	Religion	4	(Also listed as SOC 561.) Treatment of religion as a social institution. Examines the influence of religious ideas and organizations on other social institutions, and the influence of society on religion.	GR	LE	Lecture
Spring 2008	REL562	562	Anthropology of Religion	REL	Religion	4	(Also listed as ATH 546.) Anthropological approach to the meaning and function of religion in social life and the nature of the thought or belief systems that gave rise to different forms of religious life. Emphasis on primitive and peasant societies.	GR	LE	Lecture

Spring 2008	REL563	563	Religion and Psychology	REL	Religion	4	An introduction to selected themes, issues, and problems in the interaction of religion and psychology. Differing points of view are considered.	GR	LE	Lecture
Spring 2008	REL570	570	Studies in Ethics	REL	Religion	4	A special topics course for intensified study of the ethical dimensions of a particular religious tradition or for concentrated study in theoretical or practical ethical problems. Topics to be announced with each offering.	GR	LE	Lecture
Spring 2008	REL578	578	Ethics and Medicine	REL	Religion	4	(Also listed as PHL 578.) An examination of the ethical issues confronting society in the area of medicine and health care, considered from the perspective of philosophical and theological ethics. Examples include ethics of abortion, euthanasia, experimental medicine, and behavior control.	GR	LE	Lecture
Spring 2008	REL582	582	Philosophy of Religion:Process	REL	Religion	4	Realism and the revolt against idealism. Cross-disciplinary analysis of major contemporary process philosophers and the implications of their thoughts for religion. Focus on Alfred North Whitehead.	GR	LE	Lecture

Spring 2008	REL583	583	Philosophy of religion:Secular	REL	Religion	4	Cross-disciplinary analysis of modes of human awareness through which religious meaning is expressed (sensation, morality, beauty, reason, and human relations). Examination of presuppositions of contemporary secular religion in existentialism.	GR	LE	Lecture
Spring 2008	REL590	590	Studies in Selected Subj	REL	Religion	4	Problems, approaches, and topics in the field of religion. Topics vary.	GR	LE	Lecture
Spring 2008	REL631	631	Religion in American Life	REL	Religion	4	Development of religious thought and institutional life in the United States viewed in relationship to American social change.	GR	LE	Lecture
Spring 2008	REL635	635	Black Amer Religious Thought	REL	Religion	4	Analysis of black American religious thought through critical study of the writings of selected figures who have helped shape black religion from 1780 to the present.	GR	LE	Lecture
Spring 2008	REL641	641	ISLAM	REL	Religion	4	Study of the origin and development of Islam, including contemporary issues and problems.	GR	LE	Lecture
Spring 2008	REL643	643	Asian Religious Philosophy	REL	Religion	4	(Also listed as PHL 643.) Perennial themes in Asian cultures, such as individual, society, and cosmos; appearance and reality; time and history; and karma, freedom, and responsibility. Treatment of these themes in the philosophical traditions of Asian cultures.	GR	LE	Lecture

Spring 2008	REL656	656	Religious Themes in Literature	REL	Religion	4	Courses offered under this number provide intensive study of literary works in terms of significant and recurring religious themes and images as they can be traced in various cultures, and literary traditions.	GR	LE	Lecture
Spring 2008	REL670	670	Workshop	REL	Religion	1	Intensive study of selected problems (e.g., the teaching of religion in secondary school, medical ethics) to meet particular needs of participating students. Titles vary.	GR	LE	Lecture
Spring 2008	REL679	679	Ethics in Industrial Society	REL	Religion	3	(Also listed as LAW 695 and MGT 695.) Ethical responsibilities of business in light of political, moral, social, and religious considerations. Emphasis on analysis and evaluation of the changing framework of responsibilities facing both business organizations and their leaders.	GR	LE	Lecture
Spring 2008	REL687	687	Evolution,Religion and Ethics	REL	Religion	4	Introduction to the biological, philosophical, theological, and ethical aspects of evolution	GR	LE	Lecture
Spring 2008	REL693	693	Seminar in Religion	REL	Religion	4	Topics vary.	GR	LE	Lecture
Spring 2008	REL694	694	Existentialism	REL	Religion	3	(Also listed as PHL 694.) Representative writers of the existentialist movement.	GR	LE	Lecture

Spring 2008	REL701	701	Reading & Research in Religion	REL	Religion	2	Intensive research in specialized areas. Students must submit written proposals, with faculty approval, for acceptance into course.	GR	IS	Independent Study
Spring 2008	REL702	702	Reading & Research in Religion	REL	Religion	2	Intensive research in specialized areas. Students must submit written proposals, with faculty approval, for acceptance into course.	GR	IS	Independent Study
Spring 2008	REL703	703	Reading & Research in Religion	REL	Religion	2	Intensive research in specialized areas. Students must submit written proposals, with faculty approval, for acceptance into course.	GR	IS	Independent Study
Spring 2008	RHB101	101	American Sign Language I	RHB	Rehabilitation	4	Introduction to manual communication for professionals preparing to work in rehabilitation or anyone interested in learning sign language.	UG	LL	Lecture/Lab Combination
Spring 2008	RHB102	102	American Sign Language II	RHB	Rehabilitation	4	Continuation of the introduction to manual communication for professionals preparing to work in rehabilitation or for anyone interested in acquiring expertise in the area of sign language. Emphasis is on conversational skills. Aspects of deafness are covered through speakers and readings.	UG	LL	Lecture/Lab Combination

Spring 2008	RHB103	103	American Sign Language III	RHB	Rehabilitation	4	A continued expansion of the conversational ranges and knowledge of American Sign Language from RHB 101 and 102. Outside activity required.	UG	LL	Lecture/Lab Combination
Spring 2008	RHB201	201	Intro to Rehabilitation	RHB	Rehabilitation	4	A general introduction to the philosophy, history and development of rehabilitation. The course familiarizes students with areas to be considered when providing services to persons with physical/mental disabilities. Students also obtain an understanding of the rehabilitation code of ethics and social cultural influences.	UG	LE	Lecture
Spring 2008	RHB202	202	Rehabilitation Resources	RHB	Rehabilitation	4	Prepares students to locate and evaluate the local, state, and federal resources available to meet the needs of persons with disabilities. Students will visit community agencies and volunteer in a community agency of their choice for a minimum of 25 hours during the quarter.	UG	LL	Lecture/Lab Combination
Spring 2008	RHB202W	202W	Writing in RHB 202	RHB	Rehabilitation	0		UG	LB	Lab
Spring 2008	RHB210	210	Intro to Alcohol & Drugs	RHB	Rehabilitation	4	This course explores concepts, social policy, and approached related to alcohol and drug use including the addiction process, costs of abuse to the individual, family and society, and successful approaches for dealing with abuse.	UG	LE	Lecture

Spring 2008	RHB210W	210W	Writing in in RHB 210	RHB	Rehabilitation	0	Required writing component for RHB 210.	UG	LB	Lab
Spring 2008	RHB228	228	American Sign Language IV	RHB	Rehabilitation	4	This intermediate course develops grammatical and vocabulary competency in sign formation, vocabulary, morphology, syntax, and discourse.	UG	LL	Lecture/Lab Combination
Spring 2008	RHB229	229	American Sign Language V	RHB	Rehabilitation	4	Higher level grammatical features of American Sign Language are covered to enhance receptive and productive mastery of its grammar and vocabulary. Practical application of conversational and interactive scenarios are also covered.	UG	LL	Lecture/Lab Combination
Spring 2008	RHB230	230	American Sign Language VI	RHB	Rehabilitation	4	Interactive scenarios mastering grammar and vocabulary are covered via telling life events, describing events in time, asking for clarification, correcting, conforming, elaborating on information, agreement/disagreement resolving conflicts, and giving direction.	UG	LL	Lecture/Lab Combination

Spring 2008	RHB301	301	Medical Aspects Rehab I	RHB	Rehabilitation	4	Introduction to medical terminology and system disorders that usually have continued and long-standing residual effects and that commonly require rehabilitation intervention. Considers how disabling conditions impact vocational and social activities of daily living. Attention given to the pharmacological aspects of treating disabilities.	UG	LE	Lecture
Spring 2008	RHB302	302	Medical Aspects Rehab II	RHB	Rehabilitation	3	Examination of the treatment and rehabilitation of those physical disabilities that impose chronic limitations on activity. Consideration of the social and vocational adjustments that must be made by the individual.	UG	LE	Lecture
Spring 2008	RHB303	303	Employing Pers w/Disab	RHB	Rehabilitation	4	Overview of job development and job placement techniques. Various methods to access the job market through job seeking skills, resume preparation, occupational information, and job analysis are discussed. Attention is given to attitudinal and architectural barriers that people with disabilities may encounter in their job search process.	UG	LE	Lecture

Spring 2008	RHB304	304	Rehabilitation Casework	RHB	Rehabilitation	4	Assists students in acquiring skills in interviewing, case recording, writing rehabilitation plans with appropriate justifications, and case management.	UG	LE	Lecture
Spring 2008	RHB305	305	Sub Abuse:Soc & Hum Iss	RHB	Rehabilitation	4	Provides an overview of the social, cultural, and psychophysiological effects of substance abuse. Emphasis is on alcoholism and other popular mind-altering drugs.	UG	LE	Lecture
Spring 2008	RHB370	370	Ind Study Min Prob Rehab	RHB	Rehabilitation	1	Independent study in areas of interest to students that are not readily available in any existing course. Topics vary. May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	RHB401	401	Intro to MR/DD	RHB	Rehabilitation	4	The purpose of this course is to provide the student with the etiology and rehabilitation techniques for people with MR/DD.	UG	LE	Lecture
Spring 2008	RHB402	402	Career Assessment	RHB	Rehabilitation	4	The course will assist students to develop skills in test administration, scoring, interpretation, behavior observation, report writing, and the development of comprehensive career path for the individual being assessed. Hands-on experience will be an integral part of the course. This course is a WAC course for the rehabilitation services major/minor.	UG	LE	Lecture
Spring 2008	RHB402W	402W	Writing in RHB 402	RHB	Rehabilitation	0		UG	LB	Lab

Spring 2008	RHB403	403	Internship	RHB	Rehabilitation	4	Rehabilitation community field placement will assist the integration of skills learned throughout the program. Requires 400 clock hours of field work supervised by faculty and the agency.	UG	IN	Internship
Spring 2008	RHB404	404	Indep Liv/Rehab Tech	RHB	Rehabilitation	4	Discusses the history and current philosophy/application of the independent living movement and rehabilitation technology in rehabilitation services. Process will be addressed in this course.	UG	LE	Lecture
Spring 2008	RHB407	407	Prin of Rehab Counseling	RHB	Rehabilitation	4	Focuses on the development of basic skills and attitudes associated with rehabilitation counseling. Interview style and format are examined along with listening and responding techniques associated with holistic approaches.	UG	LE	Lecture
Spring 2008	RHB408	408	Comm Aspects of Deafness	RHB	Rehabilitation	4	This course is designed to introduce students to the social, culteral, and linguistic history of the deaf community in the United States. Off campus field experience is required.	UG	LE	Lecture

Spring 2008	RHB410	410	Cnl Aspects of Deafness	RHB	Rehabilitation	4	To develop a broader understanding of the psychological, medical, social, and vocational concerns of hearing impaired individuals. Focus will be upon acquiring basic counseling skills, medical aspects of hearing, and attitudinal barriers.	UG	LE	Lecture
Spring 2008	RHB411	411	Phy Dis and Human Behavio	RHB	Rehabilitation	4	This course is designed to familiarize students with the interaction of physical disabilities and human behavior. Appropriate group approaces will be reviewed.	UG	LE	Lecture
Spring 2008	RHB432	432	Death, Dying & Grieving	RHB	Rehabilitation	3	A course in death, dying, and grieving for health educators who deal with grief and loss in situations such as death, dying, survivorship, children and loss, second marriages, suicide, and other events of trauma.	UG	LE	Lecture
Spring 2008	RHB470	470	Special Topics	RHB	Rehabilitation	1	Special workshop courses to meet the needs of in-service rehabilitation professionals as well as providing courses on a one-time basis to meet special interests. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	RHB670	670	Workshop in Rehab	RHB	Rehabilitation	1	Workshop courses to meet the needs of in-service rehabilitation professionals as well as providing courses on a one-time basis to meet special interest needs.	GR	LE	Lecture

Spring 2008	RHB700	700	Foundations of Voc Rehab	RHB	Rehabilitation	4	Introduces rehabilitation. Topics include history, philosophy, legislative bases, organizational structures, rehabilitation process and procedures, public and private sectors of rehabilitation, rehabilitation agencies, and professional issues and ethics.	GR	LE	Lecture
Spring 2008	RHB701	701	Cnl Theory and Practice	RHB	Rehabilitation	1	Surveys the major theories of counseling and provides opportunities to develop the basic skills associated with the counseling process. Also addresses the key philosophical and ethical issues associated with the counseling profession.	GR	LL	Lecture/Lab Combination
Spring 2008	RHB702	702	Medical Assessment	RHB	Rehabilitation	1	Necessary terminology and knowledge of disabilities and disorders for understanding and interpreting medical reports. Symptomology, treatment, functional limitations, and other management aspects of specific disabilities encountered in the course of employment are covered. Titles vary.	GR	LE	Lecture
Spring 2008	RHB704	704	Psy Adjust:Severe Disabil	RHB	Rehabilitation	1	Psychological issues associated with specific disabling conditions. An in-depth review of the general adjustment process to disability and definitions of normality and abnormality.	GR	LL	Lecture/Lab Combination

Spring 2008	RHB705	705	Behavioral Assessment	RHB	Rehabilitation	1	Surveys psychological tests and measurements with emphasis on attitude, interest, vocational, and personality tests. Understanding of basic principles and their application to counseling in various settings are stressed.	GR	LL	Lecture/Lab Combination
Spring 2008	RHB707	707	Med Assessment Chem Dep	RHB	Rehabilitation	4	Terminology and knowledge of medical and pyschological processess associated with the use of alcohol and drugs. Identification and implementation of current intervention strategies utilized in the planning and treatment of chemical dependency are addressed.	GR	LE	Lecture
Spring 2008	RHB711	711	Vocatnl Eval & Job Pl Tec	RHB	Rehabilitation	1	The history, philosophy, theoretical basis, goals, function, and scope of vocational evaluation. Theories and principles concerning work and career development are also explored.	GR	LE	Lecture
Spring 2008	RHB712	712	Industrial Rehabilitation	RHB	Rehabilitation	1	Familiarizes rehabilitation professionals and students with industrial rehabilitation (IR), and how IR programs assist in the successful placement of people with disabilities.	GR	LE	Lecture

Spring 2008	RHB714	714	Work Incentive	RHB	Rehabilitation	1	Familiarizes rehabilitation professionals and students with the available legislated and regulatory work incentives, and how they assist in the placement of people with disabilities. Includes the following programs: Social Security Act (SS), state and federal Workers Compensation, Targeted Job Tax Credit (TJTC), and various personal insurance (LTDD, STD, Catastrophin).	GR	LE	Lecture
Spring 2008	RHB716	716	Employmnt Spec Trng	RHB	Rehabilitation	3	Familiarizes rehabilitation professionals and students with the concept of Supported Employment including definition, worker identification, learning styles, worksite and task analysis, development and implementation of skill training and support services; and demonstrates how Supported Employment is used in placement of people with disabilities.	GR	LE	Lecture

Spring 2008	RHB718	718	Devel Relat w/Bus&Ind	RHB	Rehabilitation	5	Exposes rehabilitation professionals and students to the philosophy and practices of business and industry; incorporates specific skill competencies in job development and job placement in working with business and industry; and demonstrates how these skills assist in enhancing employment opportunities and job placement of people with disabilities.	GR	LE	Lecture
Spring 2008	RHB720	720	Case Management in VR	RHB	Rehabilitation	4	Develops specific case management skills in diagnosis, information processing planning, service arrangement, program monitoring, and job placement. Emphasis on case management techniques, ethics, consultation strategies, and specialized counseling skills development.	GR	LE	Lecture
Spring 2008	RHB721	721	Prog Aspects Vocation Eva	RHB	Rehabilitation	5	Study of processes, principles, and techniques used to determine and predict work behavior and vocational potential. Consideration is given to adapting assessment tools and systems to clients' needs.	GR	LE	Lecture

Spring 2008	RHB730	730	Epidemiology Chemical Dep	RHB	Rehabilitation	1	Addresses the sociocultural influences associated with chemical dependency. Examines models of drug and alcohol use and the personal evolution of chemical dependency, and the ethical and legal ramifications germane to work in the drug-abuse field.	GR	LE	Lecture
Spring 2008	RHB731	731	Treatment Chemical Depend	RHB	Rehabilitation	1	The theory and practice of a variety of treatment modalities, including in-patient and out-patient approaches, family interventions, and group techniques. Emphasizes systems approaches and holistic intervention strategies. Also covers self-help groups such as Alcoholics Anonymous and Al-Anon.	GR	LE	Lecture
Spring 2008	RHB770	770	Independent Reading	RHB	Rehabilitation	1	Independent study in areas of interest to students but not readily available in any existing course.	GR	IS	Independent Study
Spring 2008	RHB801	801	Internship I	RHB	Rehabilitation	2	Students spend approximately twenty to thirty hours per week in a selected rehabilitation setting performing assigned entry-level work consistent with the integration of skills, attitudes, and knowledge of rehabilitation counseling.	GR	IN	Internship

Spring 2008	RHB802	802	Internship II	RHB	Rehabilitation	1	Culminating integrative experience for graduate rehabilitation counseling students. Students spend from twenty to thirty hours per week in a rehabilitation setting providing professional-level rehabilitation counseling and services to severely disabled clients.	GR	IN	Internship
Spring 2008	RHB811	811	Use Interp Vocation Eval	RHB	Rehabilitation	5	Interpretation of evaluation data to client, rehabilitation personnel, and facility staff. Attention is given to vocational counseling, staff conferences, report writing, and follow-up.	GR	LE	Lecture
Spring 2008	RHB865	865	Rehab Counseling Pract	RHB	Rehabilitation	4	Provides counseling experience in which students, under supervision, actually counsel individuals with rehabilitation concerns including vocational, educational, medical, psychosocial, and personal issues.	GR	IN	Internship
Spring 2008	RHB873	873	Internship Vocation Eval	RHB	Rehabilitation	15	Supervised practical experience in a Vocational Evaluation unit. The student will concurrently spend two hours/week in Organization and Management of VE units seminar.	GR	IN	Internship

Spring 2008	RST261	261	Regional St: Japan	RST	Regional Studies	4	Examines the development of Japanese civilization, covering topics such as the cultural and physical geography, the economic and political institutions, traditions and their effects on behavior, appreciation of nature as well as the visual and performing arts.	UG	LE	Lecture
Spring 2008	RST261W	261W	Writing in RST 261	RST	Regional Studies	0		UG	LB	Lab
Spring 2008	RST262	262	Regional Studies: China	RST	Regional Studies	4	Introduction to the historical, cultural, economic, and political reality of the world's most populous country, highlighting the cultural contributions of China's rich history, not only in the creation of modern Chinese culture but its impact on other cultures.	UG	LE	Lecture
Spring 2008	RST262W	262W	Writing in RST 262	RST	Regional Studies	0	Required writing component for RST 262.	UG	LB	Lab
Spring 2008	RST271	271	Regional Studies: Africa	RST	Regional Studies	4	Introduction to African environments; diversity of cultural heritages; changes due to modernization; colonialism, slavery, and independence; a brief survey of the relations of Africa to other non-Western regions; and the contribution of Africa to world civilization.	UG	LE	Lecture
Spring 2008	RST271W	271W	Writing in RST 271	RST	Regional Studies	0	Required writing component for RST 271.	UG	LB	Lab

Spring 2008	RST281	281	Regional Studies:Latin America	RST	Regional Studies	4	Survey of non-Western societies including Indians, mestizos, blacks, and the peasantry, from pre-Columbian and African origins to the present, in terms of ideology, organization, social structure, culture, and economic activities.	UG	LE	Lecture
Spring 2008	RST281W	281W	Writing in RST 281	RST	Regional Studies	0	Required writing component for RST 281.	UG	LB	Lab
Spring 2008	RST291	291	Regional Studies: Middle East	RST	Regional Studies	4	Introduction to the history, peoples, cultures, and geography of the Middle East from Mauritania to Pakistan from the seventh century to the present.	UG	LE	Lecture
Spring 2008	RST291W	291W	Writing in RST 291	RST	Regional Studies	0	Required writing component for RST 291.	UG	LB	Lab
Spring 2008	RUS101	101	First Year Russian	RUS	Russian	4	Study of vocabulary and structure of the Russian language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	RUS102	102	First Year Russian	RUS	Russian	4	Study of vocabulary and structure of the Russian language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	RUS103	103	First Year Russian	RUS	Russian	4	Study of vocabulary and structure of the Russian language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	RUS201	201	Second Year Russian	RUS	Russian	4	Grammar review, reading, and discussion of selected texts with practice in speaking and writing.	UG	LE	Lecture

Spring 2008	RUS202	202	Second Year Russion	RUS	Russian	4	Grammar review, reading, and discussion of selected texts with practice in speaking and writing.	UG	LE	Lecture
Spring 2008	RUS203	203	Second Year Russian	RUS	Russian	4	Grammar review, reading, and discussion of selected texts with practice in speaking and writing.	UG	LE	Lecture
Spring 2008	RUS599	599	Studies in Selected Subjects	RUS	Russian	4	Problems, approaches, and topics in the field of Russian. Topics vary.	GR	IS	Independent Study
Spring 2008	SAC101	101	British Film and Literature	SAC	Study Abroad Consortium	4.5		UG	LE	Lecture
Spring 2008	SAC200	200	Intermediate Spanish I	SAC	Study Abroad Consortium	4.5		UG	LE	Lecture
Spring 2008	SAC300	300	Spanish Composition	SAC	Study Abroad Consortium	4.5		UG	LE	Lecture
Spring 2008	SLI310	310	Linguistics in ASL I	SLI	Sign Language Interpreting	4	Study of the field of linguistics, particularly areas of phonology and morphology. Compares and contrasts ASL with English and other signed and spoken languages. Languages are analyzed to discover their patterns and structures.	UG	LE	Lecture
Spring 2008	SLI310W	310W	Writing in SLI 310	SLI	Sign Language Interpreting	0		UG	LB	Lab

Spring 2008	SLI320	320	Interpreting I	SLI	Sign Language Interpreting	4	Enhancement of the ability to produce an equivalent message, working simultaneously between the source and target languages of ASL and English, focusing on text analysis and self-evaluation.	UG	LE	Lecture
Spring 2008	SLI330	330	Transliterating I	SLI	Sign Language Interpreting	4	Enhancement of the ability to produce an equivalent message, working simultaneously between the source and target languages of signed and spoken English, focusing on text analysis and self-evaluation.	UG	LE	Lecture
Spring 2008	SLI340	340	Legal/Ethical Interpret	SLI	Sign Language Interpreting	4	Course focuses on Code of Ethics, standards of practice, legal rights, federal legislation impacting the Deaf and givernmental agencies, public services, and private services entitled to the Deaf.	UG	LE	Lecture
Spring 2008	SLI360	360	Educational Interpreting	SLI	Sign Language Interpreting	4	Types of educational settings for the Deaf or hard-of-hearing students K-12 and post secondary are presented. Communication, social and academic aspects are considered. IEP process is examined.	UG	LE	Lecture

Spring 2008	SLI370	370	Interpret Through Tech	SLI	Sign Language Interpreting	4	Exposes students to the technological advances used as means for communication within the Deaf community. Students will explore the historical and current trends in technology as it applies to the field of interpreting.	UG	LE	Lecture
Spring 2008	SLI380	380	Deaf-Blind Lang/Culture	SLI	Sign Language Interpreting	4	Overview of necessary skills and role of the interpreter when working with individuals who are Deaf-Blind. Focus on etiology of deaf-blindness and its impact on communication. Introduction to basic sighted guide techniques.	UG	LE	Lecture
Spring 2008	SLI381	381	Interpret Mental Hlt Set	SLI	Sign Language Interpreting	4	An introduction to mental health interpreting will prepare Interpreters to work with Deaf clients, providing appropriate and culturally affirming services, promote teamwork and understanding of mental health service providers and improve individual interpreting skills.	UG	LE	Lecture
Spring 2008	SLI382	382	Feedback Tech for SLI	SLI	Sign Language Interpreting	4	Students will explore the process of self-development to maintain good relationships with their ASL interpreting colleagues. Hands-on practice includes learning the cognitive and emotional strategies when providing and receiving feedback in any interpreting situation.	UG	LE	Lecture

Spring 2008	SLI383	383	Interpreting for Theater	SLI	Sign Language Interpreting	1	Course will provide students with basic skills in performance and theatrical interpreting. Script analysis and translation, theater basics, character development, and interpreter issues will be addressed. ASL interpreting skills required.	UG	LE	Lecture
Spring 2008	SLI390	390	Trends in Deaf Culture	SLI	Sign Language Interpreting	4	This course examines trends pertaining to Deaf and hard-of-hearing poplutions. Issues may include deaf education, language and literacy, sports, organizations and cochlear implants.	UG	LE	Lecture
Spring 2008	SLI390W	390W	Writing in SLI 390	SLI	Sign Language Interpreting	0		UG	LB	Lab
Spring 2008	SLI410	410	Linguistics in ASL II	SLI	Sign Language Interpreting	4	Overview of the use of space, nonmanuals, syntax, discourse and sociolinguistics. Linguistic analysis of American Sign Language and spoken languages.	UG	LE	Lecture
Spring 2008	SLI420	420	Interpreting II	SLI	Sign Language Interpreting	4	Enhancement of ability to produce an equivalent message, working simultaneously between the source and target languages of ASL and English, focusing on team interpreting working lengthy segments of discourse, and settings with multiple consumers.	UG	LE	Lecture

Spring 2008	SLI430	430	Transliterating II	SLI	Sign Language Interpreting	4	Enhancement of ability to produce an equivalent message, working simultaneously between the source and target languages of signed and spoken English, focusing on team interpreting, working lengthy segments of discourse, and settings with multiple consumers.	UG	LE	Lecture
Spring 2008	SLI440	440	Interpreting Specialties	SLI	Sign Language Interpreting	4	Specialty settings on medical, mental, health, legal, Deaf-Blind, and oral interpreting will be covered. Discussions include ethical decision making, specialized vocabulary and legal ramifications. Students will demonstrate specialized vocabulary and sign competencies.	UG	LE	Lecture
Spring 2008	SLI480	480	Voicing Registers	SLI	Sign Language Interpreting	4	Students advance their skills in producing equivalent spoken English messages from signed sourse messages in a variety of registers. Continuation of English vocabulary development, ASL vocabulary, interpreting analysis skills, and strategies for team interpreting.	UG	LE	Lecture

Spring 2008	SLI490	490	Sr Enrichment Project	SLI	Sign Languag e Interpret ing	4	Student will identify a community/professional need, develop and implement a project plan to benefit the community and/or profession. Student conducts a critical self-assessment and demonstrates appreciation for lifelong learning.	UG	SE	Seminar
Spring 2008	SM101	101	Science Thought & Method	SM	Science and Mathema tics	4	Course addresses physical and natural sciences through a number of interdisciplinary thematic units emphasizing development of practical and critical thinking skills needed to perform scientific inquiry; will use similar techniques to strengthen math skills.	UG	LE	Lecture
Spring 2008	SM101W	101W	Writing in SM 101	SM	Science and Mathema tics	0		UG	LB	Lab
Spring 2008	SM144	144	Foundations Physical Sci	SM	Science and Mathema tics	4.5	This course provides Early-Childhood Education majors with a firm foundation in science concepts and processes, skills in problem solving and critical analysis, and an understanding of constructivist, cooperative classroom environments.	UG	LE	Lecture

Spring 2008	SM145	145	Found Sci Lit & Prob Solv	SM	Science and Mathematics	3	Fundamental concepts in science treated in an interdisciplinary way and integrated with mathematics. Emphasis on development on science process skills and problem-solving abilities. Introductory experience to a constructivist and cooperative learning environment	UG	LL	Lecture/Lab Combination
Spring 2008	SM145W	145W	Writing in SM 145	SM	Science and Mathematics	0	Required writing component for SM 145.	UG	LB	Lab
Spring 2008	SM198	198	Intro to Science & Mathematics	SM	Science and Mathematics	2	Introduces students to curriculum, activities, services, and associations within the College of Science and Mathematics. Emphasis is placed on developing study skills, critical thinking processes, and career preparation in science and math. Graded pass/unsatisfactory.	UG	SE	Seminar
Spring 2008	SM199	199	Topics in Science & Math	SM	Science and Mathematics	2	Course offers challenging opportunities to participate in Mathematics, Biological Sciences, Chemistry, Geological Sciences, Physics and Psychology to academically talented students. Students work in small study groups which allows personal interaction with university research professors.	UG	IS	Independent Study

Spring 2008	SM205	205	Great Ideas in Science	SM	Science and Mathematics	4	Serves as a foundation for other science courses; introducing unifying concepts and principles in the natural sciences; 4 hrs. lecture.	UG	LE	Lecture
Spring 2008	SM205W	205W	Writing in SM 205	SM	Science and Mathematics	0		UG	LB	Lab
Spring 2008	SM445	445	Projects in Science	SM	Science and Mathematics	3	An exercise in the application of data collection and analysis to an assigned small group project, reflecting aspects of the four basic sciences. 1 hour meeting and outside project.	UG	LL	Lecture/Lab Combination
Spring 2008	SM446	446	Projects in Science II	SM	Science and Mathematics	3	Using a variety of resources, including the course website, students will individually design, implement an extended scientific investigation into one of the four basic science areas. Prerequisite SM 445 or Instructor Permission.	UG	LL	Lecture/Lab Combination
Spring 2008	SM446W	446W	Writing in SM 446	SM	Science and Mathematics	0		UG	LB	Lab
Spring 2008	SM645	645	Projects in Science I	SM	Science and Mathematics	3	An exercise in the application of data collection and analysis to an assigned small group project, reflecting analysis of the four basic sciences.	GR	LL	Lecture/Lab Combination

Spring 2008	SM646	646	Projects in Science II	SM	Science and Mathematics	3	Using a variety of resources, including the course website, students will individually design and implement and extended scientific investigation into one of the four basic science areas.	GR	LL	Lecture/Lab Combination
Spring 2008	SM646W	646W	Writing in SM 646	SM	Science and Mathematics	0		UG	LB	Lab
Spring 2008	SMC804	804	Women's Reproductive Health	SMC	Multi Community Health	8		MD	CL	Clinical
Spring 2008	SMD510	510	Human Structure	SMD	Multi Department SOM	11		MD	LL	Lecture/Lab Combination
Spring 2008	SMD512	512	Intro to Clinical Medicine I	SMD	Multi Department SOM	7		MD	LE	Lecture
Spring 2008	SMD513	513	Human Development	SMD	Multi Department SOM	1		MD	LE	Lecture
Spring 2008	SMD524	524	Social/Ethical Issues in Med	SMD	Multi Department SOM	2		MD	LE	Lecture
Spring 2008	SMD530	530	Principles of Disease	SMD	Multi Department SOM	10		MD	LE	Lecture
Spring 2008	SMD533	533	Population Health	SMD	Multi Department SOM	1		MD	LE	Lecture
Spring 2008	SMD534	534	Evidence-Based Medicine	SMD	Multi Department SOM	1		MD	LE	Lecture

Spring 2008	SMD535	535	Pathobiology/ Therapeutics	SMD	Multi Departm ent SOM	3		MD	LE	Lecture
Spring 2008	SMD541	541	Medical Neuroscience	SMD	Multi Departm ent SOM	6.75		MD	LE	Lecture
Spring 2008	SMD542	542	Intro to Clinical Med II	SMD	Multi Departm ent SOM	18		MD	LE	Lecture
Spring 2008	SMD543	543	Cardiovascular	SMD	Multi Departm ent SOM	3.75		MD	LE	Lecture
Spring 2008	SMD551	551	Blood	SMD	Multi Departm ent SOM	2.25		MD	LE	Lecture
Spring 2008	SMD552	552	Respiratory	SMD	Multi Departm ent SOM	2.25		MD	LE	Lecture
Spring 2008	SMD553	553	Gastrointestin al	SMD	Multi Departm ent SOM	2.25		MD	LE	Lecture
Spring 2008	SMD554	554	Renal	SMD	Multi Departm ent SOM	2.25		MD	LE	Lecture
Spring 2008	SMD561	561	Endocrine/Rep roduction	SMD	Multi Departm ent SOM	3.75		MD	LE	Lecture
Spring 2008	SMD563	563	Musculoskelet al/Integument	SMD	Multi Departm ent SOM	2.25		MD	LE	Lecture
Spring 2008	SMD571	571	Molecular Basis of Medicine	SMD	Multi Departm ent SOM	20		MD	LL	Lecture/La b Combinati on
Spring 2008	SMD572	572	Cells/Tissues/ Organ Systems	SMD	Multi Departm ent SOM	10		MD	LL	Lecture/La b Combinati on

Spring 2008	SMD591	591	Human Systems I Exam	SMD	Multi Departm ent SOM	4.75		MD	OT	Other
Spring 2008	SMD593	593	Human Systems II Exam	SMD	Multi Departm ent SOM	4.75		MD	OT	Other
Spring 2008	SMD600	600	Student-Initiated Elective	SMD	Multi Departm ent SOM	2		MD	LE	Lecture
Spring 2008	SMD606	606	Doctor/Patient Illness/Death	SMD	Multi Departm ent SOM	2		MD	LE	Lecture
Spring 2008	SMD609	609	Clinical Problem-Based Learn	SMD	Multi Departm ent SOM	2		MD	LE	Lecture
Spring 2008	SMD610	610	Multipro Comm-Based Pri Care	SMD	Multi Departm ent SOM	2		MD	LE	Lecture
Spring 2008	SMD611	611	Ped Hlth/Urban Environ	SMD	Multi Departm ent SOM	2		MD	LE	Lecture
Spring 2008	SMD612	612	GLOBAL HLTH INITIATIVE	SMD	Multi Departm ent SOM	2		MD	OT	Other
Spring 2008	SMD800	800	Student-Initiated Elective	SMD	Multi Departm ent SOM	4		MD	CL	Clinical
Spring 2008	SMD802	802	Ambulatory Med/Peds	SMD	Multi Departm ent SOM	8		MD	CL	Clinical
Spring 2008	SMD900	900	Extramural	SMD	Multi Departm ent SOM	4		MD	H	Hospital
Spring 2008	SME801	801	Global Health Swaziland	SME	Multi Emergen cy Medicine	8		MD	CL	Clinical

Spring 2008	SOC200	200	Social Life	SOC	Sociology	4	Introduction to the processes through which individuals become members of groups, organizations, institutions, and societies, and how human social interactions lead to changes in social life and structures.	UG	LE	Lecture
Spring 2008	SOC200W	200W	Writing in SOC 200	SOC	Sociology	0	Required writing component for SOC 200.	UG	LB	Lab
Spring 2008	SOC201	201	Modern Society	SOC	Sociology	4	Problems facing modern society and possible solutions. Exploration of such questions as: What is the nature of modern society? How are modern political, economic, and educational systems organized?	UG	LE	Lecture
Spring 2008	SOC204	204	Sociology Career Seminar	SOC	Sociology	2	Designed to help students think about their futures, become familiar with career options, relate theoretical work to practical concerns, and plan their course work with an awareness of postgraduate needs.	UG	LE	Lecture
Spring 2008	SOC204W	204W	Writing in SOC 204	SOC	Sociology	0		UG	LB	Lab
Spring 2008	SOC205	205	The Sociological Imagination	SOC	Sociology	4	Students will examine a variety of approaches and perspectives that systematically analyse complex individual and institutional behaviors as they vary culturally, subculturally, and cross-culturally.	UG	LE	Lecture

Spring 2008	SOC210	210	Simulated Society	SOC	Sociology	2	SIMSOC is a learning game designed to supplement the materials covered in introductory sociology courses. The game involves students as members of a simulated society. May be taken for letter grade or pass/unstisfactory. Prerequisiite or corequisite: Soc 200	UG	LE	Lecture
Spring 2008	SOC220	220	Simulated Society II	SOC	Sociology	2	Builds on experience of Simulated Society and analyzes societal processess; small group interaction stratification, leadership roles, political and economic philosophies; and minority relations. Students simulate a society and analyze experience. May be taken for letter grade or pass/unsatisfactory. Prerequisite: Soc 210	UG	LE	Lecture
Spring 2008	SOC221	221	Exploring Social Issues	SOC	Sociology	4	Focuses on specific social problems. Topics vary.	UG	LE	Lecture
Spring 2008	SOC231	231	Violence	SOC	Sociology	4	Defines violence, explores patterns at individual and group levels, and examines explanations for change in quantity and intensity. Areas covered include criminal violence, domestic violence, rape, homicide, and genocide.	UG	LE	Lecture

Spring 2008	SOC271	271	Soc Welf & Soc Services	SOC	Sociology	4	Study of social welfare and social services in society; introduction to generalist social work practice; continued career testing. Agency-based field project required.	UG	LE	Lecture
Spring 2008	SOC300	300	Sociological Analysis	SOC	Sociology	4	Course focuses upon the development of conceptual models used to analyze and interpret data in the social sciences.	UG	LE	Lecture
Spring 2008	SOC301	301	History Sociological Thought	SOC	Sociology	4	Historical study of the emergence and development of sociological thought from Adam Ferguson and Montesquieu through the 19th century; emphasis on the basic writings of Comte, Spencer, Marx, and others.	UG	LE	Lecture
Spring 2008	SOC301W	301W	Writing in SOC 301	SOC	Sociology	0		UG	LB	Lab
Spring 2008	SOC303	303	Contemporary Soc Theory	SOC	Sociology	4	Analyzes contemporary sociological theory (structural functionalism, symbolic interactionism, critical theory, and phenomenological theory) with a focus on the interpretation of society and on major figures of the 20th century	UG	LE	Lecture
Spring 2008	SOC303W	303W	Writing in SOC	SOC	Sociology	0		UG	LB	Lab
Spring 2008	SOC306	306	Intro to Research Methods	SOC	Sociology	4	Philosophical and applied issues of sociological investigation. Various means of collecting sociological data are analyzed.	UG	LE	Lecture

Spring 2008	SOC306W	306W	Writing in SOC 306	SOC	Sociology	0	Required writing component for SOC 306.	UG	LB	Lab
Spring 2008	SOC310	310	Sociology of Gender	SOC	Sociology	4	Introduces the theoretical and conceptual underpinnings of women's studies through exploring the changing historical, cultural, and social expressions of gender. Also examines social roles, institutions, policies, and movements which affect women.Philosophical and applied issues of sociological investigation. Various means of collecting sociological data are analyzed.	UG	LE	Lecture
Spring 2008	SOC313	313	Intensive Alcohol Ed Program	SOC	Sociology	1	Students are observer/participants in the intensive alcohol education program which presents individuals with factual material about the effect of substance abuse, both physically and socially, so that they can make knowledgeable decisions about their usage. Graded pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	SOC315	315	Drug & Alcohol Interv Workshop	SOC	Sociology	3	Participant observation of the intervention and treatment of drug and alcohol problems including therapy and counseling groups, client/therapist contact, and professionals practicing intervention and confrontation techniques. May be taken for letter grade or pass/unsatisfactory.	UG	LL	Lecture/Lab Combination

Spring 2008	SOC320	320	Sociology of Deviant Behavior	SOC	Sociology	4	Extensive exploration of the various sociological approaches to the study of deviance and social disorganization with emphasis on contemporary sociological theory and research.	UG	LE	Lecture
Spring 2008	SOC330	330	Criminology	SOC	Sociology	4	Survey of crime, some causal theories, and attempts at crime prevention in the United States.	UG	LE	Lecture
Spring 2008	SOC332	332	Juvenile Delinquency	SOC	Sociology	4	Problems of definition and treatment of delinquency. Preparation for further study and work with delinquents.	UG	LE	Lecture
Spring 2008	SOC340	340	Social Organization	SOC	Sociology	4	Theories and analysis of social organization in its historical and present context. Emphasis on the interrelationship between individuals, the family, and other institutions.	UG	LE	Lecture
Spring 2008	SOC341	341	Social Inequality	SOC	Sociology	4	Structures, theories, and consequences of social inequality with special emphasis on the United States.	UG	LE	Lecture
Spring 2008	SOC342	342	Demography of Human Population	SOC	Sociology	4	Introduction to factors influencing the structure and growth of human populations and the social consequences of population change. Patterns of fertility, mortality, and migration in today's societies are emphasized, and methods and materials used to study populations are presented.	UG	LE	Lecture

Spring 2008	SOC345	345	Social Change	SOC	Sociology	4	Explanations of social change in modern societies. Emphasis on identification of sources of change, effects of change throughout society, major trends, and issues for the future.	UG	LE	Lecture
Spring 2008	SOC350	350	Sociology of Work	SOC	Sociology	4	Investigation, analysis, and discussion of contemporary theories focusing on the relationship of the individual to work.	UG	LE	Lecture
Spring 2008	SOC360	360	Sociology of the Family	SOC	Sociology	4	Sociological analysis of family development over its life cycle. Involved is the relationship of the family to society and the individual. Topics include courtship, marriage, parenthood, adulthood, and aging.	UG	LE	Lecture
Spring 2008	SOC360W	360W	Writing in SOC 360	SOC	Sociology	0	Required writing component for SOC 360.	UG	LB	Lab
Spring 2008	SOC361	361	Religion and Society	SOC	Sociology	4	(Also listed as REL 361.) General treatment of religion as a social institution examining the influence of religious ideas and organizations on other social institutions, and the influence of society on religion.	UG	LE	Lecture
Spring 2008	SOC363	363	Sociology of Education	SOC	Sociology	4	School as a social institution. Internal and external influences, structure of the school social system, and sociological issues affecting the school such as social class factors and equality of educational opportunity.	UG	LE	Lecture

Spring 2008	SOC380	380	Individual and Society	SOC	Sociology	4	Interaction between society and the individual, forms and content of social relationships, and socialization as a social process. Emphasis in the basic writings of G. H. Mead and others.	UG	LE	Lecture
Spring 2008	SOC390	390	Directed Readings in Sociology	SOC	Sociology	2	Readings in areas of specialized interest. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	SOC399	399	Studies in Selected Subjects	SOC	Sociology	1	Problems, approaches, and topics in the field of sociology. Topics vary	UG	LE	Lecture
Spring 2008	SOC399W	399W	Writing in SOC 399	SOC	Sociology	0		UG	LB	Lab
Spring 2008	SOC401	401	Selected Topics:Theory-Methods	SOC	Sociology	4	Variable content. Specific topics will be announced in the schedule when course is offered.	UG	LE	Lecture
Spring 2008	SOC405	405	Seminar in Soc Theory	SOC	Sociology	4	An in-depth analysis of selected topics in sociological theory for advanced students, especially those contemplating graduate study. The topic selected varies from year to year.	UG	LE	Lecture
Spring 2008	SOC406	406	Applications Research Methods	SOC	Sociology	4	Advanced course in social research techniques that provides students the opportunity to design and carry out a full-scale research project within a seminar-like class setting. Students are encouraged to select research problems related to their major interest areas.	UG	LE	Lecture

Spring 2008	SOC406W	406W	Writing in SOC 406	SOC	Sociology	0	Required writing component for SOC 406.	UG	LB	Lab
Spring 2008	SOC420	420	Sociology of Sexual Behavior	SOC	Sociology	4	Course examines alternative sexual lifestyles and behaviors. Employing the concepts of cultural relativity and ethnocentrism, students learn how sexual relationships are perceived and responded to in contemporary American society.	UG	LE	Lecture
Spring 2008	SOC420W	420W	Writing in SOC 420	SOC	Sociology	0		UG	LB	Lab
Spring 2008	SOC422	422	Sociology Courts, Law, Justice	SOC	Sociology	4	Students will critically examine the process, structure, and effects of the U.S. Court system. Special attention to issues of race, class, and other social factors that affects justice in society.	UG	LE	Lecture
Spring 2008	SOC432	432	Penology	SOC	Sociology	4	Historical development and critical assessment of penal institutions. Field visits to selected institutions.	UG	LE	Lecture
Spring 2008	SOC433	433	Internship: Corrections & Fam	SOC	Sociology	4	Supervised field experience in corrections and family agencies (probation, parole, jail, juvenile, adult, and aging). Requires readings, a log, progress reports, and a paper synthesizing readings and field experience.	UG	IN	Internship
Spring 2008	SOC439	439	Sel Topics: Problems/Deviance	SOC	Sociology	4	Topics vary.	UG	LE	Lecture

Spring 2008	SOC440	440	Bureaucracy & Bureaucrats	SOC	Sociology	4	Examination of the nature of modern bureaucratic organizations, their place in society, and consequences of bureaucratic forms for their members and society.	UG	LE	Lecture
Spring 2008	SOC441	441	Industrial Sociology	SOC	Sociology	4	Cross-cultural analysis of industrialization; organization of relationships within industrial social groups.	UG	LE	Lecture
Spring 2008	SOC442	442	Race and Ethnicity	SOC	Sociology	4	Study of intergroup, racial, and ethnic group relations including the processes and consequences of conflict, prejudice, and discrimination.	UG	LE	Lecture
Spring 2008	SOC442W	442W	Writing in SOC 442	SOC	Sociology	0	Required writing component for SOC 442.	UG	LB	Lab
Spring 2008	SOC443	443	South Africa and Apartheid	SOC	Sociology	4	An introduction to the social history of South Africa and the system of apartheid. Considers several scenarios regarding the future of South Africa and invites reflection upon past and future U.S. involvement in that country.	UG	LE	Lecture
Spring 2008	SOC444	444	Urban Sociology	SOC	Sociology	4	Deals with the role of cities in past and present societies, the social and cultural implications of urban living, and special problems associated with city life.	UG	LE	Lecture
Spring 2008	SOC446	446	Neighborhoods and Communities	SOC	Sociology	4	What part do the community and the neighborhood play in the social life of modern societies? What makes a good neighborhood, a good community? These and other questions are addressed.	UG	LE	Lecture

Spring 2008	SOC457	457	Policing in Society	SOC	Sociology	4	This course will discuss the history and theories of policing while reviewing the role and function of the police.	UG	LE	Lecture
Spring 2008	SOC459	459	Explaining Crime	SOC	Sociology	4	Objective is to provide students with a sound understanding of theories of crime and how they operate within society as part of our understanding of the criminal justice system.	UG	LE	Lecture
Spring 2008	SOC460	460	Social Politics Afr-Amer Women	SOC	Sociology	4	This class examines Black Feminism/Womanist Identity from a historical and contemporary perspective and highlights changes within the African American family. Seminar format will be utilized for students to discuss class readings.	UG	LE	Lecture
Spring 2008	SOC461	461	Medical Sociology	SOC	Sociology	4	Social dimension of health and illness. Consideration of the patterns of disease, along with the organization, provision, and delivery of medical services.	UG	LE	Lecture
Spring 2008	SOC461W	461W	Writing in SOC 461	SOC	Sociology	0		UG	LB	Lab
Spring 2008	SOC462	462	Social Gerontology	SOC	Sociology	4	(Also listed as SW 462.) Study of social aspects of aging, the needs of the aging population, and society's response to these needs.	UG	LE	Lecture
Spring 2008	SOC463	463	Social Gerontology II	SOC	Sociology	4	Continuation of social gerontology. Explores in-depth concepts and issues related to aging.	UG	LE	Lecture

Spring 2008	SOC479	479	Sel Topics:Social Institutions	SOC	Sociology	4	Variable content. Specific topics will be announced in the schedule when course is offered.	UG	LE	Lecture
Spring 2008	SOC481	481	Sociology of Small Groups	SOC	Sociology	4	Study of face-to-face interaction with emphasis on both intergroup and intragroup structure and processes.	UG	LE	Lecture
Spring 2008	SOC489	489	Sel Topics:Social Interactions	SOC	Sociology	4	Titles vary.	UG	LE	Lecture
Spring 2008	SOC490	490	Independent Research:Sociology	SOC	Sociology	2	Field project in an area of interest. May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	SOC510	510	Sociology of Gender	SOC	Sociology	4	Cross-cultural sociological knowledge and theories concerning origin/nature of sex roles; stratification of sexes in various societies; sex roles in institutions of family, education, religion, politics, economics, and health; and other topics such as socialization and media.	GR	LE	Lecture
Spring 2008	SOC520	520	Sociology of Deviant Behavior	SOC	Sociology	4	Extensive exploration of the various sociological approaches to the study of deviance and social disorganization with emphasis on contemporary sociological theory and research.	GR	LE	Lecture
Spring 2008	SOC532	532	Juvenile Delinquency	SOC	Sociology	4	Problems of definition and treatment of delinquency; preparation for further study and work with delinquents.	GR	LE	Lecture

Spring 2008	SOC540	540	Social Organization	SOC	Sociology	4	Theories and analysis of social organization in its historical and present context. Emphasis on the interrelationship between individuals, the family, and other institutions.	GR	LE	Lecture
Spring 2008	SOC541	541	Social Inequality	SOC	Sociology	4	Structures, theories, and consequences of social inequality with emphasis on the United States.	GR	LE	Lecture
Spring 2008	SOC550	550	Sociology of Work	SOC	Sociology	4	Investigation, analysis, and discussion of contemporary theories focusing on the relationship of the individual to work.	GR	LE	Lecture
Spring 2008	SOC560	560	Sociology of the Family	SOC	Sociology	4	Sociological analysis of family development over its life cycle, and the relationship of the family to society and the individual. Topics include courtship, marriage, parenthood, adulthood, and aging.	GR	LE	Lecture
Spring 2008	SOC561	561	Religion and Society	SOC	Sociology	4	(Also listed as REL 561.) Treatment of religion as a social institution, examining the influence of religious ideas and organizations on other social institutions, and the influence of society on religion.	GR	LE	Lecture

Spring 2008	SOC563	563	Sociology of Education	SOC	Sociology	4	The school as a social institution. Internal and external influences; structure of the school social system; and sociological issues affecting the school, such as social class factors and equality of educational opportunity.	GR	LE	Lecture
Spring 2008	SOC599	599	Studies in Selected Subjects	SOC	Sociology	1	Problems, approaches, and topics in the field of sociology. Topics vary.	GR	LE	Lecture
Spring 2008	SOC601	601	Selected Topics:Theory Methods	SOC	Sociology	4	Topics vary.	GR	LE	Lecture
Spring 2008	SOC620	620	Sociology of Sexual Behavior	SOC	Sociology	4	This course examines alternative sexual lifestyles and behaviors. Employing the concepts of cultural relativity and ethnocentrism, we learn how sexual relationships are perceived and responded to in contemporary American society.	GR	LE	Lecture
Spring 2008	SOC622	622	Sociology: Courts,Law,Justice	SOC	Sociology	4	Students will critically examine the process, structure, and effects of the U.S. court system. Special attention will be given to issues of race, class, and other social factors that affect justice in society.	GR	LE	Lecture
Spring 2008	SOC632	632	Penology	SOC	Sociology	4	Historical development and critical assessment of penal institutions. Field visits to selected institutions.	GR	LE	Lecture

Spring 2008	SOC633	633	Internship in Corrections	SOC	Sociology	4	Supervised field experience in corrections (e.g., probation, parole, and jail). Course requires readings, a log, progress reports, and a paper synthesizing readings and field experience.	GR	IN	Internship
Spring 2008	SOC639	639	Sel Topics: Problems/Deviance	SOC	Sociology	4	Topics vary.	GR	LE	Lecture
Spring 2008	SOC641	641	Industrial Sociology	SOC	Sociology	4	Cross-cultural analysis of industrialization; organization of relationships within industrial social groups.	GR	LE	Lecture
Spring 2008	SOC642	642	Race and Ethnicity	SOC	Sociology	4	Intergroup, racial, and ethnic group relations, including the processes and consequences of conflict, prejudice, and discrimination.	GR	LE	Lecture
Spring 2008	SOC644	644	Urban Sociology	SOC	Sociology	4	Role of cities in past and present societies, the social and cultural implications of urban living, and problems associated with city life.	GR	LE	Lecture
Spring 2008	SOC646	646	Neighborhoods and Communities	SOC	Sociology	4	Examines the part the community and the neighborhood play in the social life of modern societies. What makes a good neighborhood? What makes a good community? These and other questions are addressed.	GR	LE	Lecture
Spring 2008	SOC657	657	Policing in Society	SOC	Sociology	4	Developed to expand the depth of the criminology track for Sociology majors independent of, but which may be used as, course work for the new ABS CJ track.	GR	LE	Lecture

Spring 2008	SOC659	659	Explaining Crime:Beccaria-Thor	SOC	Sociology	4	Objective is to provide students with a sound understanding of theories of crime and how they operate within society as part of our understanding of the criminal justice system.	GR	LE	Lecture
Spring 2008	SOC661	661	Medical Sociology	SOC	Sociology	4	The social dimension of health and illness. Consideration of the patterns of disease, along with the organization, provision, and delivery of health care services.	GR	LE	Lecture
Spring 2008	SOC662	662	Social Gerontology	SOC	Sociology	4	(Also listed as SW 662.) Study of social aspects of aging, the needs of the aging population, and society s response to those needs.	GR	LE	Lecture
Spring 2008	SOC663	663	Social Gerontology II	SOC	Sociology	4	(Also listed as SW 663.) Continuation of social gerontology. Explores in-depth concepts and issues related to aging.	GR	LE	Lecture
Spring 2008	SOC679	679	Sel Topics:Social Institutions	SOC	Sociology	4	Topics vary.	GR	LE	Lecture
Spring 2008	SOC681	681	Sociology of Small Groups	SOC	Sociology	4	Study of face-to-face interaction with emphasis on both intergroup and intragroup structure and processes.	GR	LE	Lecture
Spring 2008	SOC689	689	Sel Topics:Social Interaction	SOC	Sociology	4	Topics vary.	GR	LE	Lecture
Spring 2008	SOC690	690	Directed Studies in Sociology	SOC	Sociology	2	May be taken for letter grade or pass/unsatisfactory.	GR	LE	Lecture

Spring 2008	SOC701	701	Selected Topics in Sociology	SOC	Sociology	2	Variable content. Specific topic announced when course is offered.	GR	LE	Lecture
Spring 2008	SOC720	720	Seminar in Social Deviance	SOC	Sociology	4	Study of contemporary theories of deviant behavior from both an institutional and social-psychological perspective, with emphasis on the relationship between social change and social disorganization.	GR	LE	Lecture
Spring 2008	SOC760	760	Seminar on Family Problems	SOC	Sociology	4	(Also listed as ABS 781.) Builds on the foundations of society and its institutions to examine contemporary problems facing American families.	GR	LE	Lecture
Spring 2008	SOC770	770	Seminar Criminal Justice	SOC	Sociology	4	(Also listed as ABS 771.) Investigation of the criminal justice system in the United States and its relation to deviant adult and juvenile behavior.	GR	LE	Lecture
Spring 2008	SOM701	701	Year 4 Medical Study	SOM	School of Medicine	24		MD	OT	Other
Spring 2008	SOM702	702	Year 4 Medical Study	SOM	School of Medicine	24		MD	OT	Other
Spring 2008	SOM703	703	Year 3 Medical Study	SOM	School of Medicine	24		MD	CL	Clinical
Spring 2008	SOM704	704	Year 3 Medical Study	SOM	School of Medicine	24		MD	CL	Clinical
Spring 2008	SOM705	705	Year 1 Medical Study	SOM	School of Medicine	24		MD	LE	Lecture

Spring 2008	SOM706	706	Year 1 Medical Study	SOM	School of Medicine	24		MD	LE	Lecture
Spring 2008	SOM707	707	Year 2 Medical Study	SOM	School of Medicine	24		MD	LE	Lecture
Spring 2008	SOM708	708	Year 2 Medical Study	SOM	School of Medicine	24		MD	LE	Lecture
Spring 2008	SPN101	101	First Year Spanish	SPN	Spanish	4	Study of the vocabulary and structure of the Spanish language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	SPN102	102	First Year Spanish	SPN	Spanish	4	Study of the vocabulary and structure of the Spanish language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	SPN103	103	First Year Spanish	SPN	Spanish	4	Study of the vocabulary and structure of the Spanish language; practice in conversation, reading, and writing.	UG	LE	Lecture
Spring 2008	SPN111	111	Essentials of Spanish	SPN	Spanish	4	Introduction to Spanish with an emphasis on speaking the language.	UG	LE	Lecture
Spring 2008	SPN150	150	Spanish Grammar Review	SPN	Spanish	4	A thorough review of Spanish grammar with an emphasis on oral practice.	UG	LE	Lecture
Spring 2008	SPN201	201	Second Year Spanish	SPN	Spanish	4	Grammar review, reading, and discussion of selected texts with practice in speaking and writing the language.	UG	LE	Lecture
Spring 2008	SPN202	202	Second Year Spanish	SPN	Spanish	4	Grammar review, reading, and discussion of selected texts with practice in speaking and writing the language.	UG	LE	Lecture

Spring 2008	SPN203	203	Second Year Spanish	SPN	Spanish	4	Grammar review, reading, and discussion of selected texts with practice in speaking and writing the language.	UG	LE	Lecture
Spring 2008	SPN311	311	Spanish Conversation	SPN	Spanish	4	Practice in oral use of Spanish emphasizing the culture of the Hispanic world.	UG	LE	Lecture
Spring 2008	SPN312	312	Spanish Conversation	SPN	Spanish	4	Practice in oral use of Spanish emphasizing the culture of the Hispanic world.	UG	LE	Lecture
Spring 2008	SPN313	313	Spanish Conversation	SPN	Spanish	4	Practice in speaking Spanish with emphasis on culture of the Hispanic world.	UG	LE	Lecture
Spring 2008	SPN321	321	Spanish Composition	SPN	Spanish	4	Oral and written composition in Spanish; translations from English into Spanish.	UG	LE	Lecture
Spring 2008	SPN321W	321W	Writing in SPN 321	SPN	Spanish	0	Required writing component for SPN 321.	UG	LB	Lab
Spring 2008	SPN322	322	Spanish Composition	SPN	Spanish	4	Oral and written composition in Spanish; translations from English into Spanish.	UG	LE	Lecture
Spring 2008	SPN322W	322W	Writing in SPN 322	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN323	323	Spanish Composition	SPN	Spanish	4	Oral and written composition in Spanish; translations from English into Spanish. Further grammar study.	UG	LE	Lecture
Spring 2008	SPN323W	323W	Writing in SPN 323	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN325	325	Business Spanish	SPN	Spanish	4	An introduction to the language of business Spanish with insight into Spain and Latin America within the global economy.	UG	LE	Lecture
Spring 2008	SPN325W	325W	Writing in SPN 325	SPN	Spanish	0		UG	LB	Lab

Spring 2008	SPN326	326	Business Spanish	SPN	Spanish	4	Study of the business culture behind Spanish. Development of the communication skills and intercultural understanding. Use of Spanish in international business.	UG	LE	Lecture
Spring 2008	SPN326W	326W	Writing in SPN 326	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN331	331	Survey of Spanish Lit	SPN	Spanish	4	Historical survey of Spanish literature. From the beginning to romanticism.	UG	LE	Lecture
Spring 2008	SPN331W	331W	Writing in SPN 331	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN332	332	Survey of Spanish Lit	SPN	Spanish	4	Historical survey of Spanish literature. From romanticism to the present.	UG	LE	Lecture
Spring 2008	SPN332W	332W	Writing in SPN 332	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN333	333	Survey of Spanish-Amer Lit	SPN	Spanish	4	Reading of prose, poetry, and plays by Spanish-American writers. From pre-Columbian times to romanticism.	UG	LE	Lecture
Spring 2008	SPN333W	333W	Writing in SPN 333	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN334	334	Survey Spanish-Amer Lit	SPN	Spanish	4	Reading of prose, poetry, and plays by Spanish-American writers. From romanticism to the present.	UG	LE	Lecture
Spring 2008	SPN334W	334W	Writing in SPN 334	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN361	361	Spanish Phonetics	SPN	Spanish	2	Study of the vowel and consonant sound system through phonetic method; intonation.	UG	LE	Lecture
Spring 2008	SPN381	381	Applied Elem Spn Instruct	SPN	Spanish	1	Spanish majors assist elementary course instructors in conducting classes. For Spanish majors only.	UG	IN	Internship

Spring 2008	SPN382	382	Applied Elem Spn Instruct	SPN	Spanish	1	Spanish majors assist elementary course instructors in conducting classes. For Spanish majors only.	UG	IN	Internship
Spring 2008	SPN383	383	Applied Elem Spn Instruct	SPN	Spanish	1	Spanish majors assist elementary course instructors in conducting classes. For Spanish majors only.	UG	IN	Internship
Spring 2008	SPN399	399	Studies in Selected Subj	SPN	Spanish	1	Problems, approaches, and topics in the field of Spanish. Topics vary.	UG	IS	Independent Study
Spring 2008	SPN399W	399W	Writing in SPN	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN401	401	Spanish Picaresque Novel	SPN	Spanish	4	Intensive reading of such works as Lazarillo de Tormes, Vida del Buscon, and Guzman de Alfarache.	UG	LE	Lecture
Spring 2008	SPN402	402	Spanish Novel 19th Cent	SPN	Spanish	4	19th century prose work by Galdos and others.	UG	LE	Lecture
Spring 2008	SPN403	403	Adv Studies: Lang Civiliz	SPN	Spanish	4	Topics vary. Conducted in Spanish.	UG	LE	Lecture
Spring 2008	SPN403W	403W	Writing in SPN 403	SPN	Spanish	0	Required writing component for SPN 403.	UG	LB	Lab
Spring 2008	SPN411	411	Golden Age Drama	SPN	Spanish	4	Intensive readings of dramas by playwrights of the 16th and 17th centuries.	UG	LE	Lecture
Spring 2008	SPN412	412	Modern Drama	SPN	Spanish	4	Intensive readings of dramas by playwrights of the 19th and 20th centuries.	UG	LE	Lecture
Spring 2008	SPN421	421	Cervantes Part I	SPN	Spanish	4	Intensive study of the works of Cervantes including Don Quixote, novelas ejemplares, entremeses, and longer dramatic works. Lectures, discussions, and oral reports on Cervantes and his time.	UG	LE	Lecture

Spring 2008	SPN422	422	Cervantes Part II	SPN	Spanish	4	Intensive study of the works of Cervantes including Don Quixote, novelas ejemplares, entremeses, and longer dramatic works. Lectures, discussions, and oral reports on Cervantes and his time.	UG	LE	Lecture
Spring 2008	SPN422W	422W	Writing in SPN	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN431	431	Sem Spanish Lit	SPN	Spanish	4	Intensive study of selected topics in peninsular literature. Background lectures, oral reports, and discussions. Topics vary.	UG	LE	Lecture
Spring 2008	SPN432	432	Seminar Spn-Am Lit	SPN	Spanish	4	Intensive study of selected topics in Spanish-American literature. Background lectures, oral reports, and discussions. Topics vary.	UG	LE	Lecture
Spring 2008	SPN432W	432W	Writing in SPN 432	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN441	441	Contemp Spanish Lit	SPN	Spanish	4	Readings in the novel, poetry, and drama of major Spanish writers in the post-Civil War period.	UG	LE	Lecture
Spring 2008	SPN442	442	Contemp Lat-Am Lit	SPN	Spanish	4	Readings in the novels, poetry, and drama of various Latin-American writers from the late 1930s to the present.	UG	LE	Lecture
Spring 2008	SPN450	450	Undergrad Research in Spn	SPN	Spanish	1	Topics vary.	UG	IS	Independent Study
Spring 2008	SPN450W	450W	Writing in SPN 450	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN462	462	The Generation of 1898	SPN	Spanish	4	Novel, poetry, and theatre of Unamuno, Baroja, and others.	UG	LE	Lecture

Spring 2008	SPN481	481	Independ Read Adv Student	SPN	Spanish	4	Topics vary.	UG	IS	Independent Study
Spring 2008	SPN482	482	Independ Read Adv Student	SPN	Spanish	4		UG	IS	Independent Study
Spring 2008	SPN483	483	Business in L. America	SPN	Spanish	4	This course studies, in both English and Spanish, fundamental concepts of doing business, managing, and marketing in Latin America. Examines cultural, institutional, behavioral and management systems and their operations in Latin America.	UG	LE	Lecture
Spring 2008	SPN483W	483W	Writing in SPN 483	SPN	Spanish	0		UG	LB	Lab
Spring 2008	SPN511	511	Spanish Conversation	SPN	Spanish	4	Practice in oral use of Spanish emphasizing the culture of the Hispanic world.	GR	LE	Lecture
Spring 2008	SPN512	512	Spanish Conversation	SPN	Spanish	4	Practice in oral use of Spanish emphasizing the culture of the Hispanic world.	GR	LE	Lecture
Spring 2008	SPN521	521	Spanish Composition	SPN	Spanish	4	Oral and written composition in Spanish; translations from English into Spanish.	GR	LE	Lecture
Spring 2008	SPN522	522	Spanish Composition	SPN	Spanish	4	Oral and written composition in Spanish; translations from English into Spanish.	GR	LE	Lecture
Spring 2008	SPN523	523	Spanish Composition	SPN	Spanish	4	Oral and written composition in Spanish; translations from English into Spanish. Further grammar study.	GR	LE	Lecture

Spring 2008	SPN525	525	Business Spanish	SPN	Spanish	4	An introduction to the language of business Spanish with insight into Spain and Latin America within the global economy.	GR	LE	Lecture
Spring 2008	SPN526	526	Business Spanish	SPN	Spanish	4	Study of the business culture behind Spanish. Development of communication skills and intercultural understanding. Use of Spanish in International Business.	GR	LE	Lecture
Spring 2008	SPN531	531	Survey of Spanish Lit	SPN	Spanish	4	Historical survey of Spanish literature from the beginning to romanticism.	GR	LE	Lecture
Spring 2008	SPN532	532	Survey of Spanish Lit	SPN	Spanish	4	Historical survey of Spanish Literature from romanticism to the present.	GR	LE	Lecture
Spring 2008	SPN533	533	Survey of Span-Amer Lit	SPN	Spanish	4	Reading of prose, poetry, and plays by Spanish-American writers. From pre-Columbian times to romanticism.	GR	LE	Lecture
Spring 2008	SPN534	534	Survey of Span-Amer Lit	SPN	Spanish	4	Reading of prose, poetry, and plays by Spanish-American writers from romanticism to the present.	GR	LE	Lecture
Spring 2008	SPN581	581	Applied Elem Spn Instr	SPN	Spanish	1	Assistance for elementary course instructors in conducting classes.	GR	LE	Lecture
Spring 2008	SPN590	590	Foreign Lang Institute	SPN	Spanish	8	For teachers of Spanish. Intensive experience designed, through total immersion, to improve language skills (conversation and composition) and increase awareness of Spanish civilization and contemporary culture.	GR	LE	Lecture

Spring 2008	SPN602	602	Spanish Novel 19th Cent	SPN	Spanish	4	Nineteenth-century prose works by Galdos and others.	GR	LE	Lecture
Spring 2008	SPN603	603	Adv Studies: Lang Civiliz	SPN	Spanish	4	Topics vary. Conducted in Spanish.	GR	LE	Lecture
Spring 2008	SPN611	611	Golden Age Drama	SPN	Spanish	4	Intensive readings of dramas by playwrights of the sixteenth and seventeenth centuries.	GR	LE	Lecture
Spring 2008	SPN612	612	Modern Drama	SPN	Spanish	4	Intensive readings of dramas by playwrights of the nineteenth and twentieth centuries.	GR	LE	Lecture
Spring 2008	SPN621	621	Don Quixote Part I	SPN	Spanish	4	Cervantes. Intensive study of the works of Cervantes, including Don Quixote, novelas ejemplares, entremeses, and longer dramatic works. Lectures, discussions, and oral reports on Cervantes and his time.	GR	LE	Lecture
Spring 2008	SPN631	631	Sem in Spanish Literature	SPN	Spanish	4	Intensive study of selected topics in peninsular literature. Background lectures, oral reports, and discussions. Titles vary.	GR	LE	Lecture
Spring 2008	SPN632	632	Sem in Spanish-Amer Lit	SPN	Spanish	4	Readings and reports in the novel, poetry, and drama of selected Spanish-American authors. Representative works of Borges, Garcma, Marquez, Rulfo, Paz, Vargas Llosa, Sanchez, and others.	GR	LE	Lecture
Spring 2008	SPN641	641	Contemporary Spanish Lit	SPN	Spanish	4	Readings in the novel, poetry, and drama of major Spanish writers in the post-Civil war period.	GR	LE	Lecture

Spring 2008	SPN642	642	Contemp Latin Amer Lit	SPN	Spanish	4	Readings in the novel, poetry, and drama of various Latin-American writers from the late 1930s to the present day.	GR	LE	Lecture
Spring 2008	SPN650	650	Ind Grad Research	SPN	Spanish	1	Independent graduate research.	GR	IS	Independent Study
Spring 2008	SPN662	662	The Generation of 1898	SPN	Spanish	4	Novel, poetry, and theatre of Unamuno, Baroja, and others.	GR	LE	Lecture
Spring 2008	SPN681	681	Ind Read Grad Students	SPN	Spanish	4	Independent reading for graduate students.	GR	IS	Independent Study
Spring 2008	SPN682	682	Ind Read Grad Students	SPN	Spanish	4	Independent reading for Graduate students.	GR	IS	Independent Study
Spring 2008	SPN683	683	Latin American Business	SPN	Spanish	4	This course studies, in both English and Spanish, fundamental concepts of doing business, managing and marketing in Latin America. Examines cultural, institutional and behavioral and management systems and their operation in Latin America.	GR	IS	Independent Study
Spring 2008	STT160	160	Statistical Concepts	STT	Statistics	5	An introduction to the fundamental ideas of statistics. Topics include descriptive statistics, probability, confidence intervals, and testing hyotheses, as well as the basic of Chi-square tests, regression and correlation, and analysis of variance.	UG	LE	Lecture
Spring 2008	STT160W	160W	Writing in STT 160	STT	Statistics	0	Required writing component for STT 160.	UG	LB	Lab

Spring 2008	STT264	264	Elementary Statistics I	STT	Statistics	4	Numerical and graphical methods for finding and summarizing important features of data. Principles of designing experiments for collecting data. Introduction to probability. Use of statistical computing package to apply methods and illustrate concepts.	UG	LE	Lecture
Spring 2008	STT264L	264L	Elementary Statistics I Lab	STT	Statistics	0	Required laboratory for STT 264.	UG	LB	Lab
Spring 2008	STT265	265	Elementary Statistics II	STT	Statistics	4	Confidence intervals and hypothesis testing introduction. Applications to means, proportions, two-sample comparisons, contingency tables, linear regression, and analysis of variance. Use of statistical computing package to apply methods to data sets.	UG	LE	Lecture
Spring 2008	STT265L	265L	Elementary Statistics II Lab	STT	Statistics	0	Required laboratory for STT 265.	UG	LB	Lab

Spring 2008	STT342	342	Prob/Stat-Middle Sch Tchr	STT	Statistics	4	Probability and statistical methods applied to real problems. Scientific method of investigation. Data collection, organization, display, and analysis. Empirical and axiomatic probability, simulation, variation, sampling, expected values, and statistical inference. Probability and uncertainty. For early and middle childhood and mathematics education majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	STT360	360	Applied Statistics I	STT	Statistics	4	Introduction to probability, random variables and their expectations, some commonly used discrete and continuous distributions, concept of random sampling and sampling distributions. Use of computer software packages for simulating, summarizing, and displaying data.	UG	LE	Lecture
Spring 2008	STT361	361	Applied Statistics II	STT	Statistics	4	Introduction to statistics, standard statistical methods for estimation of parameters and hypothesis testing, introduction to regression analysis and analysis of variance techniques, exposure to data analysis using packaged computer programs.	UG	LE	Lecture
Spring 2008	STT363	363	Engineering Statistics	STT	Statistics	3	Introduction to probability, distributions, and statistical methods; using calculus to develop the necessary theory.	UG	LE	Lecture

Spring 2008	STT367	367	Introduction to SAS	STT	Statistics	2	Introduction to the use of the statistical analysis system, a statistical computing package widely used in industry, government, and academia.	UG	LE	Lecture
Spring 2008	STT386	386	Ind Read in Stat and Prob	STT	Statistics	1	Topics vary.	UG	IS	Independent Study
Spring 2008	STT396	396	Topics in Stat and Prob	STT	Statistics	1	Titles vary. May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independent Study
Spring 2008	STT401	401	Nonparametric Methods	STT	Statistics	4	Distribution-free estimation and hypothesis testing procedures. Includes methods for use in one- and two-sample location and dispersion problems, nonparametric alternatives to ANOVA and regression, goodness-of-fit tests, measures of association, and tests for randomness.	UG	LE	Lecture
Spring 2008	STT411	411	Applied Time Series	STT	Statistics	4	Stochastic models for discrete time series in the time-domain, moving average processes, autoregressive processes, model identification, parameter estimation, and forecasting. Statistical computing software packages are used.	UG	LE	Lecture

Spring 2008	STT424	424	Statist Quality Control	STT	Statistics	4	Statistical process control for attributes and variables data: probability distributions, sampling plans, control charts, statistical control, process capability, process improvement, tolerance intervals, evolutionary operation, and applications.	UG	LE	Lecture
Spring 2008	STT426	426	Survival Analysis	STT	Statistics	4	Censoring and truncation, survival and hazard functions, estimation and hypothesis tests, Cox proportional hazards model, diagnostics of the Cox model; state-of-the-art software for survival analysis models.	UG	LE	Lecture
Spring 2008	STT428	428	Queuing Theory	STT	Statistics	4	Stochastic concept of a queuing process is developed. Theories and applications of single and many server queues are presented. Emphasis on applications in engineering and computer science.	UG	LE	Lecture
Spring 2008	STT430	430	Biostatistics	STT	Statistics	4	The statistical methods suitable for analysis of data arising in biological and related studies. Estimation and hypothesis testing are reviewed. Methods include one and two sample tests, simple and multiple regression, and analysis of variance.	UG	LE	Lecture

Spring 2008	STT461	461	Theory of Statistics I	STT	Statistics	4	Probability, random variables, density and distribution functions, expectation, moment generating functions, special discrete and continuous distributions; joint, marginal and conditional distributions; independence, properties of expected values, functions of random variables.	UG	LE	Lecture
Spring 2008	STT462	462	Theory of Statistics II	STT	Statistics	4	Limiting distributions, central limit theorem, statistics and sampling distribution point estimation, properties of estimators, sufficiency and completeness, interval estimation, hypothesis testing, most powerful and UMP tests, likelihood ration tests.	UG	LE	Lecture
Spring 2008	STT464	464	Computational Statistics	STT	Statistics	4	Bootstrapping is a computing-intensivemethod of data analysis by computing distributions. The method, including permutation tests, can be adapted easily to many classical problems. Doftware used for the course includes SPLUS and Mathematica.	UG	LE	Lecture
Spring 2008	STT466	466	Statistical Methods I	STT	Statistics	4	Classical statistical techniques for analysis and interpretation of research data including the use of statistical software packages. Includes descriptive statistics, one-and-two-sample inferences, regression and correlation analysis.	UG	LE	Lecture
Spring 2008	STT466W	466W	Writing in STT 466	STT	Statistics	0	Required writing component for STT 466.	UG	LB	Lab

Spring 2008	STT467	467	Statistical Methods II	STT	Statistics	4	Continuation of STT 466. Includes analysis of variance, multiple comparisons, analysis of covariance, contingency table analysis, goodness of fit tests.	UG	LE	Lecture
Spring 2008	STT467W	467W	Writing in STT	STT	Statistics	0		UG	LB	Lab
Spring 2008	STT469	469	Intro to Exp Design	STT	Statistics	4	Randomization, replication, blocking factorial design. Block designs; multi-factor experiments; fixed-, random- and mixed-effects models; repeated measures; nested factors; split-plot designs; confounding and fractions for 2**k factorial experiements. Statistical software used extensively.	UG	LE	Lecture
Spring 2008	STT486	486	Ind Read in Stat & Prob	STT	Statistics	1	Independent study in statistics and probability.	UG	IS	Independent Study
Spring 2008	STT492	492	Undergrad Statistics Sem	STT	Statistics	3	Detailed study of a single statistical topic or problem in practice of statistics chosen by student with approval of the instructor. The student will present the results of study in an expository paper. Seminars/Independent study. Limited to 10 students. Mathematics majors with statistics option only.	UG	SE	Seminar
Spring 2008	STT492W	492W	Writing in STT	STT	Statistics	0		UG	LB	Lab
Spring 2008	STT496	496	Topics in Stat and Prob	STT	Statistics	1	Topics in statistics and probability.	UG	IS	Independent Study

Spring 2008	STT502	502	Prob for Engineers	STT	Statistics	4	Presentation of probability concepts and techniques as applied to engineering applications. Introduces and applies probability distributions, measures of association, inferences on responses, and basic experimental design. Emphasis is on application of statistical tools.	GR	LE	Lecture
Spring 2008	STT503	503	Statistics for Engineers	STT	Statistics	4	Focus on analysis techniques for multiple variables, including ANOVA and multiple regression as applied to engineering testing, development, and manufacturing. Process analysis and improvment technique presented, along with tools for reliability analysis.	GR	LE	Lecture
Spring 2008	STT520	520	Biostatistics	STT	Statistics	4	Introduction to the basic principles and applications of statistical methods as they are applied to data arising in the health professions.	GR	LE	Lecture
Spring 2008	STT560	560	Applied Statistics I	STT	Statistics	4	Introduces probability, random variables and their expectations, some commonly used discrete and continuous distributions, concept of random sampling and sampling distributions. Uses computer software packages for simulating, summarizing, and displaying data.	GR	LE	Lecture

Spring 2008	STT561	561	Applied Statistics II	STT	Statistics	4	Introduces statistics, standard statistical methods for estimation of parameters and hypothesis testing, regression analysis and analysis of variance techniques, and exposure to data analysis using packaged computer programs.	GR	LE	Lecture
Spring 2008	STT567	567	Introduction to SAS	STT	Statistics	2	Introduces the use of Statistical Analysis System (SAS), a statistical computing package widely used in industry, government, and academia.	GR	LE	Lecture
Spring 2008	STT568	568	Design of Sample Surveys	STT	Statistics	4		GR	LE	Lecture
Spring 2008	STT586	586	Ind Read in Stat and Pro	STT	Statistics	1	Independent reading in statistics and probability.	GR	IS	Independent Study
Spring 2008	STT591	591	Statistics for Nursing	STT	Statistics	0.5	Coverage of concepts, principles, interpretation and practical rules of thumb for advanced statistical methods used in nursing research.	GR	LE	Lecture
Spring 2008	STT596	596	Topics in Stat and Prob	STT	Statistics	1	May be taken for letter grade or pass/unsatisfactory. Titles vary.	GR	IS	Independent Study

Spring 2008	STT601	601	Nonparametric Methods	STT	Statistics	4	Distribution-free estimation and hypothesis testing procedures. Includes methods for use in one- and two-sample location and dispersion problems, nonparametric alternatives to ANOVA and regression, goodness-of-fit tests, measures of association, and tests for randomness.	GR	LE	Lecture
Spring 2008	STT611	611	Applied Time Series	STT	Statistics	4	Stochastic models for discrete time series in the time-domain, moving average processes, autoregressive processes, model identification, parameter estimation, and forecasting. Statistical computing software packages are used.	GR	LE	Lecture
Spring 2008	STT624	624	Statistic Quality Control	STT	Statistics	4	Statistical process control for attributes and variables data: probability distributions, sampling plans, control charts, statistical control, process capability, process improvement, tolerance intervals, evolutionary operation, and applications.	GR	LE	Lecture
Spring 2008	STT626	626	Survival Analysis	STT	Statistics	4	Censoring and truncation, survival and hazard functions, estimation and hypothesis tests, Cox proportional hazards model; diagnostics of the Cox model; state-of-the-art software for survival analysis models.	GR	LE	Lecture

Spring 2008	STT628	628	Queueing Theory	STT	Statistics	4	The stochastic concept of a queueing process is developed. The theory and applications of single and many server queues are presented. Particular emphasis is placed on application in engineering and computer science.	GR	LE	Lecture
Spring 2008	STT630	630	Biostatistics	STT	Statistics	4	Statistical methods suitable for analysis of data arising in biological and related studies. Estimation and hypothesis testing are reviewed. Methods include one and two sample tests, simple and multiple regression, and analysis of variance.	GR	LE	Lecture
Spring 2008	STT646	646	Statistical Methods I	STT	Statistics	4	Classical statistical techniques for analysis and interpretation of research data, with extensive use of statistical software. Includes review of basic statistics. Simple, multiple, and polynomial regression, and single factor analysis of variance are covered.	GR	LE	Lecture
Spring 2008	STT647	647	Statistical Methods II	STT	Statistics	4	Continuation of STT 646. Analysis of variance, techniques for interpretation of research data, with extensive use of statistical software. Includes factoral experiments, fixed and random effects, crossed and nested factors, and repeated measures.	GR	LE	Lecture

Spring 2008	STT661	661	Theory of Statistics I	STT	Statistics	4	Probability, random variables, density and distribution functions, expectation, moment generating functions, special discrete and continuous distributions; joint, marginal and conditional distributions; independence, properties of expected values, functions of random variables.	GR	LE	Lecture
Spring 2008	STT662	662	Theory of Statistics II	STT	Statistics	4	Limiting distributions, central limit theorem, statistics and sampling distributions, point estimation, properties of estimators, sufficiency and completeness, interval estimation, hypothesis testing, most powerful and UMP tests, likelihood ratio tests.	GR	LE	Lecture
Spring 2008	STT664	664	Computational Statistics	STT	Statistics	4	Bootstrapping is a computing-intensive method of data analysis by computing distributions. The method, including permutation tests, can be easily adapted to many classical problems. Software used for the course includes SPLUS and Mathematica.	GR	LE	Lecture
Spring 2008	STT666	666	Statistical Methods I	STT	Statistics	4	Classical statistical techniques for analysis and interpretation of research dataincluding the use of statistical software packages. Includes descriptive statistics, one- and two-sample inferences, regression and correlation analysis.	GR	LE	Lecture

Spring 2008	STT667	667	Statistical Methods II	STT	Statistics	4	Continuation of STT 666. Includes analysis of variance, multiple comparisons, analysis of covariance, contingency table analysis, goodness of fit tests.	GR	LE	Lecture
Spring 2008	STT669	669	Intro to Expermtl Design	STT	Statistics	4	Randomization, replication, blocking, factoral design. Block designs; multi-factor experiements; fixed-, random-, and mixed-effects models; repeated measures; nested factors; split-plot designs; confounding and fractions for 2**k factorial experiments. Statistical software used extensively.	GR	LE	Lecture
Spring 2008	STT686	686	Ind Read in Stat and Prob	STT	Statistics	1	Independent reading in statistics and probability.	GR	IS	Independent Study
Spring 2008	STT696	696	Topics in Stat and Prob	STT	Statistics	1	Topics in statistics and probability.	GR	IS	Independent Study
Spring 2008	STT702	702	Applied Stochastic Process	STT	Statistics	4	Stationary processes, Markov chains, Poisson processes, pure birth process, queuing processes, inventory problems, and traffic flow problems.	GR	LE	Lecture
Spring 2008	STT706	706	Intro Environmental Stat	STT	Statistics	4	Introduction to sampling schemes, exploratory data analysis, probability distributions, and statistical methods for environmental data. Confidence, prediction and tolerance intervals. Introduction to linear models, simulation and risk assessment, and stochastic processes.	GR	LE	Lecture

Spring 2008	STT714	714	Environmental Statistics	STT	Statistics	4	Statistical techniques for the modeling and analysis of spatial and time-series environmental data, including spatio-temporal analysis, using appropriate software. Applications and case studies.	GR	LE	Lecture
Spring 2008	STT721	721	Sampling Design	STT	Statistics	4	Applications of sampling theory and basic methods of sampling selection. Simple random sampling, systematic sampling, sampling with probability proportionate to unit size, use of auxiliary estimators, and Warner's procedure.	GR	LE	Lecture
Spring 2008	STT740	740	Categorical Data Analysis	STT	Statistics	4	Standard techniques for analyzing and describing two-dimensional contingency tables. Logistic regression models and loglinear models developed for data structures involving categorical response variables, including model selection procedures, diagnostics, association graphs, and collapsibility. SAS procedures used for analysis of data sets.	GR	LE	Lecture
Spring 2008	STT744	744	Applied Multivariate Analysis	STT	Statistics	4	Matrix theory, multivariate distributions, likelihood ratio tests, MANOVA, covariance structure analysis, and classification techniques.	GR	LE	Lecture

Spring 2008	STT761	761	Theory of Linear Models	STT	Statistics	4	Concepts of matrix algebra and the multivariate normal distribution are developed in order to study the general linear model of full rank. Some applications of regression are covered.	GR	LE	Lecture
Spring 2008	STT762	762	Topics in Linear Models	STT	Statistics	4	Computing techniques and applications of the general linear model. Correlation and regression are emphasized.	GR	LE	Lecture
Spring 2008	STT764	764	Topics in Experi Design	STT	Statistics	4	Continuation of STT 669. Topics from incomplete block designs, blocked and fractional asymmetric factorial designs, mixture experiments, split-plot designs, response surface methods, parameter design, hierarchical designs, variance components, mixed models.	GR	LE	Lecture
Spring 2008	STT767	767	Applied Regression Analys	STT	Statistics	4	Multiple linear regression with introduction to more complicated models, including nonlinear models and up-to-date computing techniques. Completion of a mathematical statistics course or permission of instructor.	GR	LE	Lecture
Spring 2008	STT786	786	Ind Read in Stat and Prob	STT	Statistics	1	Independent reading in statistics and probability.	GR	IS	Independent Study
Spring 2008	STT791	791	Statistical Consulting	STT	Statistics	3	Consultation with graduate students and faculty on statistical problems arising from research projects.	GR	SE	Seminar
Spring 2008	STT796	796	Topics in Stat and Prob	STT	Statistics	1	Topics in statistics and probability.	GR	IS	Independent Study
Spring 2008	STT899	899	Graduate Research	STT	Statistics	1	Supervised thesis research.	GR	IS	Independent Study

Spring 2008	SUR600	600	Student Initiated Surgery	SUR	Surgery	2		MD	LE	Lecture
Spring 2008	SUR605	605	Intro to General Surgery	SUR	Surgery	2		MD	CL	Clinical
Spring 2008	SUR606	606	Intro to Cardiac Surgery	SUR	Surgery	2		MD	CL	Clinical
Spring 2008	SUR607	607	Intro to Anesthesiology	SUR	Surgery	2		MD	CL	Clinical
Spring 2008	SUR608	608	Intro to Plastic Recon Surgery	SUR	Surgery	2		MD	CL	Clinical
Spring 2008	SUR609	609	Intro to Anesthesiology	SUR	Surgery	2		MD	LE	Lecture
Spring 2008	SUR610	610	Trauma	SUR	Surgery	2		MD	CL	Clinical
Spring 2008	SUR611	611	Intro to Surgery Oncology	SUR	Surgery	2		MD	CL	Clinical
Spring 2008	SUR612	612	Intro to Ophthalmology	SUR	Surgery	2		MD	CL	Clinical
Spring 2008	SUR613	613	Intro to Otology	SUR	Surgery	2		MD	CL	Clinical
Spring 2008	SUR614	614	Intro to Urology	SUR	Surgery	2		MD	CL	Clinical
Spring 2008	SUR700	700	Surgery Clerkship	SUR	Surgery	16		MD	CL	Clinical
Spring 2008	SUR800	800	Student-Initiated Elective	SUR	Surgery	4		MD	CL	Clinical
Spring 2008	SUR814	814	Adventures in Urology	SUR	Surgery	8		MD	CL	Clinical

Spring 2008	SUR819	819	Basic Ped Surgery	SUR	Surgery	4		MD	CL	Clinical
Spring 2008	SUR820	820	Intro Clinical SUR Research	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR821	821	Anesthesiology, PC Physician	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR822	822	Anesthesiology, PC Physician	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR823	823	Surgical Critical Care	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR825	825	Plastic/Reconstructive SUR	SUR	Surgery	4		MD	CL	Clinical
Spring 2008	SUR826	826	Intro to Anesthesiology	SUR	Surgery	4		MD	CL	Clinical
Spring 2008	SUR828	828	Cardiac Surgery	SUR	Surgery	4		MD	CL	Clinical
Spring 2008	SUR829	829	JI General Surgery/Trauma	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR830	830	Advanced LAP Surgery	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR831	831	Colon and Rectal Surgery	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR832	832	General Surgery	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR833	833	Vascular Surgery	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR834	834	Gen'l Office/Operative Urology	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR835	835	Anesthesia Pain Management	SUR	Surgery	8		MD	CL	Clinical

Spring 2008	SUR836	836	MED/SUR Ophthalmology	SUR	Surgery	4		MD	CL	Clinical
Spring 2008	SUR837	837	Diag/Mgmt Common ENT Disease	SUR	Surgery	4		MD	CL	Clinical
Spring 2008	SUR838	838	Diag/Mgmt ENT (outlying)	SUR	Surgery	4		MD	CL	Clinical
Spring 2008	SUR839	839	PS Recon/Rsch Wounds	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR840	840	Gen'l SUR/Oncology	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR841	841	JI General Surgery	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR842	842	Trauma Surgery	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR843	843	Thoracic Surgery	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR844	844	Vascular Surgery	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR845	845	JI Gen'l Surgery, UMSA	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR846	846	Gen'l SUR/Burn Service	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR891	891	Surgical Subspecialties	SUR	Surgery	8		MD	CL	Clinical
Spring 2008	SUR900	900	Extramural	SUR	Surgery	4		MD	H	Hospital

Spring 2008	SW270	270	Soc Work as a Profession	SW	Social Work	4	Introduction to the profession: historical development, value base, social systems perspective on social problems, and major fields of practice. Includes required knowledge, skills, and values; critical thinking; problem solving; self-awareness; and appreciation of racial, ethnic, and cultural pluralism.	UG	LE	Lecture
Spring 2008	SW271	271	Soc Welf & Soc Services	SW	Social Work	4	Study of social welfare and social services in society; introduction to generalist social work practice; continued career testing. Agency-based field project required.	UG	LE	Lecture
Spring 2008	SW272	272	Cultural Competency	SW	Social Work	4	Introduction to the knowledge, skills and process required to develop cultural compentency. Content covers the historical development of discrimination and the need for cultural competency within the U.S. and international communities.	UG	LE	Lecture
Spring 2008	SW272W	272W	Writing in SW 272	SW	Social Work	0		UG	LB	Lab

Spring 2008	SW291	291	Descriptive Statistics	SW	Social Work	4	Discuss descriptive statistical methods for social science research. Includes theory and application of frequency distributions, graphic representations, measures of central tendency and variability, Statistical Package for Social Sciences. Introduces probability and measures of association.	UG	LL	Lecture/Lab Combination
Spring 2008	SW291	291	Descriptive Statistics	SW	Social Work	4	Discuss descriptive statistical methods for social science research. Includes theory and application of frequency distributions, graphic representations, measures of central tendency and variability, Statistical Package for Social Sciences. Introduces probability and measures of association.	UG	LE	Lecture
Spring 2008	SW320	320	Workshop in Current Prob	SW	Social Work	1	Intensive study of a particular problem area, utilizing professionally qualified personnel from academia and the practice community. Specific subtitles to be added with individual workshops.	UG	LE	Lecture
Spring 2008	SW375	375	Hum Behav in Soc Func	SW	Social Work	4	Analysis of human behavior in assessment of social functioning as it relates to social work intervention. Includes ego psychology, social-systems theory, role theory, and learning theory.	UG	LE	Lecture

Spring 2008	SW380	380	Basic Practice Theory	SW	Social Work	4	Foundation sequence of generalist social work practice theory. Problem assessment, data collecting, data analysis, intervention methods, and evaluation procedures. Introduction to task-centered approach.	UG	LE	Lecture
Spring 2008	SW380W	380W	Writing in SW 380	SW	Social Work	0	Required writing component for SW 380.	UG	LB	Lab
Spring 2008	SW389	389	Problems Social Wk Practi	SW	Social Work	1	Selected topics related to current issues in social work practice; readings, research, and discussion.	UG	LE	Lecture
Spring 2008	SW394	394	Readings in Social Work	SW	Social Work	2	May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	SW399	399	Study in Sel Subjects	SW	Social Work	1	Problems, approached, and topics in the field of social work. Topics vary. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	SW462	462	Social Gerontology I	SW	Social Work	4	Study of social aspects of aging, the needs of the aging population, and society's response to these needs. (Also listed as SOC 462.)	UG	LE	Lecture
Spring 2008	SW463	463	Social Gerontology II	SW	Social Work	4	Continuation of social gerontology.	UG	LE	Lecture
Spring 2008	SW470	470	Social Welfare Policy	SW	Social Work	4	Development, status, and effectiveness of social welfare policies. Application of social work values and knowledge to current policies, programs, and services.	UG	LE	Lecture

Spring 2008	SW473	473	Child Welfare	SW	Social Work	4	Framework for categorizing child welfare problems. Historical and current examination of legislation, policies, programs, and services to address child welfare needs including the role of the child welfare worker.	UG	LE	Lecture
Spring 2008	SW480	480	Gerontology Practicum	SW	Social Work	4	Supervised learning under direction of faculty and agency staff. 10 weeks/20 hours per week, or 20 weeks/10 hours per week.	UG	IN	Internship
Spring 2008	SW481	481	Generalist Prac: Individ	SW	Social Work	4	In-depth study of generalist social work practice theory for the enhancement of social functioning of individuals.	UG	LE	Lecture
Spring 2008	SW481W	481W	Writing in SW 481	SW	Social Work	0	Required writing component for SW 481.	UG	LB	Lab
Spring 2008	SW482	482	Generalist Prac: Groups	SW	Social Work	4	In-depth study of generalist social work practice theory for the enhancement of social functioning of small groups.	UG	LE	Lecture
Spring 2008	SW483	483	Generalist Prac: Families	SW	Social Work	4	In-depth study of generalist social work practice theory for the enhancement of family social functioning.	UG	LE	Lecture
Spring 2008	SW484	484	Generalist Prac:Orgs&Commun	SW	Social Work	4	In-depth study of generalist social work practice theory for the enhancement of social functioning in social welfare organizations and communities.	UG	LE	Lecture

Spring 2008	SW487	487	Soc Work Practicum I	SW	Social Work	4	Application of theory to practice in agency settings. Individual supervised learning experiences and on-site seminars under direction of instructor and agency staff.	UG	IN	Internship
Spring 2008	SW488	488	Soc Work Practicum II	SW	Social Work	4	Application of theory to practice in agency settings. Individual supervised learning experiences and on-site seminars under direction of instructor and agency staff.	UG	IN	Internship
Spring 2008	SW489	489	Soc Work Practicum III	SW	Social Work	4	Application of theory to practice in agency settings. Individual supervised learning experiences and on-site seminars under direction of instructor and agency staff.	UG	IN	Internship
Spring 2008	SW489W	489W	Writing in SW 489	SW	Social Work	0	Required writing component for SW 489.	UG	LB	Lab
Spring 2008	SW490	490	Social Work Research I	SW	Social Work	4	Sequential study of evaluative research design methodology. Development of criteria for the selection and intelligent use of research reports. Evaluation of selected research reports for relevance to social work practice.	UG	LE	Lecture
Spring 2008	SW491	491	Research Methods in SW II	SW	Social Work	4	Continuation of SW 291 and SW 490 with the emphasis of applying inferential statistics during Social Work research.	UG	LL	Lecture/Lab Combination
Spring 2008	SW494	494	Ind Res in Social Work	SW	Social Work	2	May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture

Spring 2008	SW520	520	Workshop in Current Probl	SW	Social Work	1	Intensive study of a particular problem area, utilizing professionally qualified personnel from academia and the practive community. Specific subtitles to be added with individual workshops. May be repeated to a maximum of 12 credit hours.	GR	LE	Lecture
Spring 2008	SW580	580	Basic Practice Theory	SW	Social Work	4	Generalist social work practice theory. Problem assessment, data collection, data analysis, interventive methods, and evaluation procedures are studied and simulated.	GR	LE	Lecture
Spring 2008	SW599	599	Studies in Selected Subjects	SW	Social Work	1	Variable content dealing with problems, approaches, and topics in the field of social work. Titles vary. May be taken for a letter grade or pass/unsatisfactory.	GR	LE	Lecture
Spring 2008	SW662	662	Social Gerontology I	SW	Social Work	4	(Also listed as SOC 662.) Social aspects of aging. The needs of the population and society's response to those needs.	GR	LE	Lecture
Spring 2008	SW663	663	Social Gerontology	SW	Social Work	4	(Also listed as SOC 663.) Explores in-depth concepts and issues related to aging.	GR	LE	Lecture
Spring 2008	SW680	680	Gerentology Practicum	SW	Social Work	4	Supervised learning under direction of faculty and agency staff. Ten weeks/twenty hours per week, or twenty weeks/ten hours per week.	GR	IN	Internship
Spring 2008	SW681	681	Generalist Prac: Individ	SW	Social Work	4	In-depth study of generalist social work practice theory for the enhancement of social functioning of individuals.	GR	LE	Lecture

Spring 2008	SW681W	681W	Writing in SW 681	SW	Social Work	0		GR	LB	Lab
Spring 2008	SW682	682	Generalist Pract: Groups	SW	Social Work	4	In-depth study of generalist social work practice theory for the enhancement of social functioning as small groups.	GR	LE	Lecture
Spring 2008	SW683	683	Generalist Prac: Families	SW	Social Work	4	In-depth study of generalist social work practice theory for the enhancement of family social functioning.	GR	LE	Lecture
Spring 2008	SW684	684	Generalist Prac: Orgs&Comm	SW	Social Work	4	In-depth study of generalist social work practice theory for the enhancement of social welfare organizations and communities.	GR	LE	Lecture
Spring 2008	SW690	690	Research Methods in SW I	SW	Social Work	4	First course in a two quarter sequence study of evaluation research methodology. Criteria for intelligent consumption of research reports. Evaluation of selected research reports for relevance to social work practice.	GR	LE	Lecture
Spring 2008	SW691	691	Research Methods in SW II	SW	Social Work	4	Second course in a two quarter sequence study with the emphasis of applying inferential statistics during social work research.	GR	LL	Lecture/Lab Combination
Spring 2008	SW694	694	Dir Studies Social Work	SW	Social Work	2		GR	LE	Lecture
Spring 2008	SW695	695	SW Foundation Topics	SW	Social Work	3	The Social Work Foundation Courses include content in human behavior in the social environment, social welfare policies and programs, social work practice, and social work research.	GR	LE	Lecture

Spring 2008	TAC210	210	Financial Accounting I	TAC	Technical Accounting	3	Development of financial accounting theory and its application to complex problems in the valuation of balance sheet accounts, determination of the net income, and preparation of financial statements.	UG	LE	Lecture
Spring 2008	TAC211	211	Financial Accounting II	TAC	Technical Accounting	3	Development of financial accounting theory and its application to complex problems in the valuation of balance sheet acounts, determination of net income, and preparation of financial statements.	UG	LE	Lecture
Spring 2008	TAC220	220	Cost Accounting I	TAC	Technical Accounting	3	Practice of cost accounting and cost procedures in industry: job order, process, and standard cost methods.	UG	LE	Lecture
Spring 2008	TAC221	221	Cost Accounting II	TAC	Technical Accounting	3	Practice of cost accounting and cost procedures in industry: job order, process, and standard cost methods.	UG	LE	Lecture
Spring 2008	TAC224	224	Payroll Accounting	TAC	Technical Accounting	3	Familiarization of payroll accounting systems, understanding tax laws in relation to payroll, and practical application to records and related tax forms.	UG	LE	Lecture
Spring 2008	TAC225	225	Tax Accounting I	TAC	Technical Accounting	3	Income tax regulations related to business and individual income tax reporting.	UG	LE	Lecture
Spring 2008	TAC226	226	Tax Accounting II	TAC	Technical Accounting	3	Income tax regulations related to business and individual income tax reporting.	UG	LE	Lecture

Spring 2008	TAC260	260	Computerized Accounting	TAC	Technical Accounting	4	Study of software programs for accounting applications. Reviews the process of set-up, initial entries, and analysis of data complied.	UG	LE	Lecture
Spring 2008	TAC280	280	Auditing	TAC	Technical Accounting	3	Introduction to priniples, procedures, and standards involved in the conduct of an audit by an accountant.	UG	LE	Lecture
Spring 2008	TAC295	295	Independent Study	TAC	Technical Accounting	1	Directed study on selected topics.	UG	IS	Independent Study
Spring 2008	TAC297	297	Studies in Selected Subjects	TAC	Technical Accounting	1	Problems, approaches, and topics in the field of accounting. Titles vary. May be taken for a letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	TAC299	299	Internship	TAC	Technical Accounting	4	Practical business experience in accounting for qualified students under the joint planning and coordination of faculty, student, and business representative.	UG	IN	Internship
Spring 2008	TAD200	200	Business Law	TAD	Technical Admin	4	The study of law as it relates to business organizations and transactions. Considers the nature and classification of law, courts, torts, contracts, corporations, and negotiable instruments.	UG	LE	Lecture

Spring 2008	TDP130	130	Basic I	TDP	Technical Data Processing	4	Programming elements of BASIC language; techniques for debugging and interpreting computer output; linkage to subroutines and overlays; file-structure involving sequential access; case studies with business applications. 3 hours lecture, 2 hours lab.	UG	LE	Lecture
Spring 2008	TDP210	210	Electronic Spreadsheets	TDP	Technical Data Processing	3	Use of the electronic spreadsheet as an integrated program that combines spreadsheet processing, word processing, and data base management software with graphics capabilities. Emphasis on how to save, retrieve, extract data, create a spredsheet, and use worksheet commands, database commands, and graphic commands. Two hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TDP211	211	ADV Spreadsheet Application	TDP	Technical Data Processing	3	Use of the electronic spreadsheet that incorporates use of macros, database functions, logical functions and operations, and /X Commands. 2 hours lecture, 2 hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	TDP221	221	Systems Analysis I	TDP	Technical Data Processing	3	An introduction to the fundamental concepts of systems development and design. Topics included are: basic system concepts, planning, elements of systems, performing sysstems study, and alternatives in systems design. 2 hours lecture, 2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TDP222	222	Systems Analysis II	TDP	Technical Data Processing	3	The student must design and implement an information system from managerial perspective. This will include analysis of present information flow, systems specifications, equipment selection, and system effectiveness. 2 hours lecture, 2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TDP230	230	Intro To Operating Systems	TDP	Technical Data Processing	4	Introduction to the concepts of computer operating systes and resource allocation. Topics will include executive options, layred products, multiprocessing and multiprogramming options, utility functions, and memory management. Laboratory assignments will consist of generating and tailoring a usable operating system with layered products. 2 hours lecture, 4 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TDP295	295	Independent Study	TDP	Technical Data Processing	1	Directed study on selected topics. May be taken for letter grade or pass/unsatisfactory.	UG	IS	Independent Study

Spring 2008	TDP297	297	Studies Selected Topics	TDP	Technical Data Processing	1	Problems, approaches, and topics in the field of data processing. Titles vary. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	TDP299	299	Internship	TDP	Technical Data Processing	4	Practical data processing experience under the joint planning and coordination of faculty, student, and buisness representative. May be taken for letter grade or pass/unsatisfactory. Completion of 60 hours of course work required.	UG	IN	Internship
Spring 2008	TEG131	131	Statistical Proc Control	TEG	Technical Engineering	3	Emphasis on classic probability as it serves the pratical tools of statistical process control and single, double, sequential, variable and continuous sampling plans. Includes basic concepts of statistics and probability, sampling, process quality, control charts, acceptance sampling, and an introduction to reliability.	UG	LE	Lecture
Spring 2008	TEG141	141	Development of EGR & TECH	TEG	Technical Engineering	2	Historical perspective of the development of engineering, science, and technology, including the interrelationship of technology and society.	UG	LE	Lecture

Spring 2008	TEG145	145	CAD I	TEG	Technical Engineering	4	Basic concepts of engineering drawing applied to manual and computer-aided drafting. Orthographic projection to produce complete multi-view drawings. Computer basics for drawing set-up, constructionm and file management. 2 hours lecture, 4 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG146	146	CAD II	TEG	Technical Engineering	4		UG	LL	Lecture/Lab Combination
Spring 2008	TEG150	150	Manufacturing I	TEG	Technical Engineering	3	An introduction to many of the basic tools, machines, and measuring instruments used in the manufacturing industry. Emphasizes safety in the operation of industrial metal-working equipment, understanding material cutting science, and logical process decisions. Lab work will emphasize turning operations and permanent metal joining techniques. 2 hours lecture, 2 hours lab. Prerequisite:TMT 113 or permission of instructor.	UG	LL	Lecture/Lab Combination

Spring 2008	TEG151	151	Manufacturing II	TEG	Technical Engineering	3	A continuation of TEG 150. Course will involve further discussion of manufacturing processes as well as hands-on machining experience. Lab work will emphasize milling operations, welding operations and EDM machining. 2 hours lecture, 2 hours lab. Prerequisite: TEG 150 or permission from instructor.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG152	152	Automated Manufacturing I	TEG	Technical Engineering	4	An introduction to the operation and programming of computer numerically controlled equipment. The student will learn the process of writing and aditing CNC programs and the basic principles of CAD-CAM software operation. 2 hours lecture, 4 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG153	153	Manufacturing II	TEG	Technical Engineering	4	A step-by-step process through the operation of computer-aided-manufacturing software to manipulate part programs and produce standard CNC code. Will use the basic principles of CAD for product design and CAM to set-up tool paths, offsets, and other required information to produce the CNC codes and manufacture the parts. 2 hours lecture. 4 hours lab. Prerequisite: TEG 152, TMT 114 pr permission of instructor.	UG	LL	Lecture/Lab Combination

Spring 2008	TEG160	160	Fund of AC/DC Electronics	TEG	Technical Engineering	4	Electricity, voltage, power and energy. Symbology per industry standards. Series, parallel and combination circuits and their applications. Introduction to AC quantities, including magnetic, capacitive and inductive quantities. Fundamental operation of motors and generators. 2 hours lecture, 4 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG161	161	Indus Control Circuits	TEG	Technical Engineering	4	Semiconductor theory fundamentals and applications. Application of AC/DC fundamentals using motors and controllog circuits. Ladder diagrams, sequential analysis and evaluaation of of symbology used in control dircuits. Basics of programmable logic controllers are introduced. 2 hours lecture, 4 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG201	201	Statics	TEG	Technical Engineering	4	Forces, resulants. components, moments; euilibrium of particles and rigid bodies; analysis of structures; centroids and moments of inertia. 4 hours lecture. Prerequisite: TMT 115, PHY 111, 101L	UG	LE	Lecture

Spring 2008	TEG202	202	Dynamics	TEG	Technical Engineering	4	Motion of particles and rigid bodies; displacement, velocity, acceleration, force, and mass; torque, mass moments of inertia,rotation; work-energy relation fo rparticles and rigid bodies. 4 hours lecture. Prerequisite: TEG 201	UG	LE	Lecture
Spring 2008	TEG203	203	Strength of Materials	TEG	Technical Engineering	4	Axial stress and strain, shear stress and strain, torsion of circular shafts, combined stresses; shear and bending moment diagrams; deflection of beams and columns; modes of failure. 4 hours lecture. Prerequisite: TEG 202	UG	LE	Lecture
Spring 2008	TEG205	205	CAD/CAM Operations	TEG	Technical Engineering	4	Studies the relationship of CAD and CAM operations. Student will use 3D models as a database for automated code generation and manufacture of products on standard CNC machines. 2 hours lab, 4 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG206	206	Technical Illustration	TEG	Technical Engineering	4	This course is primarily concerned with development of reproducable pictorials-obliques, isometrics, axonometrics, perspectives, and autoshade drawings. Use of MICROCAD will help to make the transition from mechanical drawing to geometric modeling. 2 hours lecture, 4 hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	TEG209	209	Fluid Mechanics	TEG	Technical Engineering	3	Gasic study of hydrolics and pneumatics. Applications of hydraulic principles to industrial control systems and compressed air systems to common industrial control circuits. Prerequisites: PHY 111, 101L; TMT 113	UG	LE	Lecture
Spring 2008	TEG210	210	Electronics I	TEG	Technical Engineering	4	An introduction to the basic concepts of semiconductor devices and their applications. Diode and bipolar transistors are discussed. Diode applications - half wave rectifier, bridge rectifier, and power supply are covered. Class A amplifier gain, input and output impedance, bias techniques, and transistor configurations are explained. 2 hours lecture, 4 hours lab. Prerequisite: TEG 161.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG211	211	Comput Programming Tech	TEG	Technical Engineering	3	Will begin with basic PC fundamentals and continue through the study of higher level languages using BASIC for solution of engineering problems. Typical PC applications are presented. 2 hours lecture, 4 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG212	212	Materials Science	TEG	Technical Engineering	4	The fundamental chemistry and application of chemistry and physics to the commonly endountered engineering materials including ferrous and non-ferrous metals, ceramics, polymers, and composites. 3 hours lecture, 2 hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	TEG218	218	Facility Design	TEG	Technical Engineering	3	Material flow, warehousing, quantitive techniques, estimating, planning, and design of industrial and service facilities with emaphasis on material handling, production and office layout, management, personnel, aesthetics, and the environment. 3 hours lecture.	UG	LE	Lecture
Spring 2008	TEG219	219	Industrial Safety	TEG	Technical Engineering	3	To introduce the student to a comprehensive approach to the central factors involved in developing safe practices and conditions. Imparts in the student the ability to set up safety organizations and conduct safety education and training. Gives the student the ability to recognize the effect of plant layout, mechanical guards, and the occupational health hazzards on injury rates and accident costs. Imparts in the student the economic and engineering aspects of fire protection, personal protection equipment, industrial waste disposal, and the analysis of a safety program.	UG	LE	Lecture

Spring 2008	TEG220	220	Electronics II	TEG	Technical Engineering	4	Continuation in the discussion of transistor amplifiers. AC load line, class B power amplifier, and transformer couplings are discussed. JFET, E-MOSFET, D-MOSFET, transistors, their biasing techniques, and applications are introduced. 2 hours lecture, 4 hours lab. Prerequisite: TEG 210.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG221	221	Automation & Robotics	TEG	Technical Engineering	4	Application programming course on automated manufacturing. Robotic programming with pendant and BASIC. Cell interfacing; robot, CNC, and support devices operating in a BASIC programming environment. 2hours lecture, 4 hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	TEG225	225	Work Measurement	TEG	Technical Engineering	3	An overview of the concepts of work measurement and its use in the industrial environment. The techniques behind time and mothin study, work sampling, predetermined time systems, and standard data will be studied. Emphasis will be on understanding the application and ramification of work measurement in manufactoring organizations. Will explore the Continuous Improvement concept, or Just-in-Time (JIT) and how it is impacted by work measurement. Will visist the related disciplines of production management, capacity analysis, and manufacturing flow and facilities. 3 hours lecture. Prerequisiste: TMG 201.	UG	LE	Lecture
Spring 2008	TEG226	226	Metallurgy	TEG	Technical Engineering	3	This is a first course dealing with the terminology and designations of materials used in manufacturing and emphasizes the relation between the nature of materials and their properties. The altering of properties for design purposes and methods of comparing and testing materials for selection are covered.	UG	LE	Lecture

Spring 2008	TEG230	230	Electronics III	TEG	Technical Engineering	4	Introduction of differential and operational amplifier and their various applications. Summing amplifier, integrator, comparator, active filter, and oscillators are discussed. 555 timer and solid stat switching circuit such as Schmitt trigger and multivibrator are introduced. 2 hours lecture, 4 hours lab. Prerequisite: TEG 220.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG232	232	Industrial Electronics	TEG	Technical Engineering	4	Motors, transformers, components used in electrical control circuits such as contacts, relays, timers, etc. phase shift control, photo-electric control, time delay circuits, static switching, and servo-mechanisms. 2 hours lecture, 4 hours lab. Prerequisite: TEG 230.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG233	233	Process Control	TEG	Technical Engineering	3	Industrial processes: types, examples, and common problems. Sensors used in industrial processes. Fundamentals of industrial control. Programmable controllers: programming, hardware, operation, applications, installation, maintenance, and troubleshooting. 2 hours lecture, 2 hours lab. Prerequisite: TEG 161 or permission of instructor.	UG	LL	Lecture/Lab Combination

Spring 2008	TEG235	235	Industrial Systems	TEG	Technical Engineering	4	A study of components that make up a tyupical industrial control system. Various sensor and control subsystems are evaluated both individually and in combination. Industrial applications of lasers and fiber optics are studied both with regard to sensor and data communication usage. 2 hours lecture, 4 hours lab. Prerequisite: TEG 232.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG240	240	Digital Logic	TEG	Technical Engineering	4	Boolean algebra, combination logic, and more complex digital circuits such as flip-flops, registers, counters, decoders. encoders, multiplexers, adder, and timers. 2 hours lecture, 4 hours lab. Prerequisite: TMT 113 or permission of instructor.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG241	241	Microprocessors I	TEG	Technical Engineering	4	This course extensively covers 8086 assembly and machine language programming. The internal functionality of current microcomputers are presented along with basic system architecture and multiplexed display circuitry. 3 hours lecture, 2 hours lab. Prerequisite: TEG 240 or permission of instructor.	UG	LL	Lecture/Lab Combination

Spring 2008	TEG242	242	Microprocessors II	TEG	Technical Engineering	4	A continuation of TEG 241 expanding the study to include typical microcomputer subsytems such as keyboards, floppy and hard disc systems, dot matrix and laser printers, and video interfaces. Diagnostic techniques are presented and practiced. 3 hours lecture, 2 hours lab. Prerequisite: TEG 241.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG243	243	Microprocessors III	TEG	Technical Engineering	4	Continuation of TEG 242 will cover hardware, software, and repair of complete microcomputer applications. CAD, communications systems, control systems, and measurement applications are presented. 3 hours lecture, 2 hours lab. Prerequisiste: TEG 242.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG250	250	Electronic Communications	TEG	Technical Engineering	3	Methods of transmission of digital data are studied, particularly modems and Lan's. Exposure to setup, installation, and troubleshooting is given. 2 hour lecture, 2 hours lab. Prerequisite: TEG 242.	UG	LL	Lecture/Lab Combination

Spring 2008	TEG270	270	CAD II	TEG	Technical Engineering	5	Provides students with CAD techniques on computer operating systems and software customization with the use of macro and menus. This course covers adapting a CAD system to one's own needs. The principles of 3d drawing will be covered. The student will learn to use the User Coordinate System and other AutoCAD options to create and view pictorial views of objects. 2 hors lecture, 6 hours lab. Prerequisite: TEG 170.	UG	LL	Lecture/Lab Combination
Spring 2008	TEG295	295	Independent Study	TEG	Technical Engineering	1	Directed studies on selected topics.	UG	IS	Independent Study
Spring 2008	TEG297	297	Studies in Selected Subjects	TEG	Technical Engineering	1	Problems, approaches, and topics in the field of engineering. Titles vary. May be taken for letter grade or pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	TEN085	085	Basic Writing	TEN	Technical English	4	Helps students develop and improve writing skills. Subject areas includes grammar, sentence structure, paragrah development, essay writing, and proof reading. Cannot be applied toward graduation. Graded pass/unsatisfactory.	UG	LE	Lecture

Spring 2008	TFI205	205	Business Finance	TFI	Technical Finance	3	Introduction to basic concepts, principles, and analytical techniques of financial management. Emphasis on planning and managing assests, and financial structure decisions. Topics include asset management, capital budgeting, cost of capital, financial leverage, and the demands for funds in the business sector of the economy. Forms of business financing and fundamental concepts of capital budgeting and analyzed.	UG	LE	Lecture
Spring 2008	TFI236	236	Sem in Slct Real Estate Topics	TFI	Technical Finance	3	Various topics to be covered depending upon demand and instructor's objectives.	UG	LE	Lecture
Spring 2008	TH100	100	Musical Theatre Voice	TH	Theatre	1	Half-hour musical theatre voice lessons per week for theatre majors only.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH102	102	Intro Technical Theatre	TH	Theatre	3	General survey of technical aspects of theatre including its personnel and organization.	UG	LE	Lecture
Spring 2008	TH103	103	Vocal Prod & IPA-Actor	TH	Theatre	2	For acting majors only. Application of the International Phonetic Alphabet and understanding the physiological structure of the vocal mechanism.	UG	LL	Lecture/Lab Combination
Spring 2008	TH104	104	IPA for Singing Actors	TH	Theatre	1	Basic training in the International Phonetic Alphabet for musical theatre acting majors.	UG	LL	Lecture/Lab Combination

Spring 2008	TH105	105	Vocal Production and IPA	TH	Theatre	1	Departmental majors only. Basics of singing and application of International Phonetic Alphabet.	UG	LL	Lecture/Lab Combination
Spring 2008	TH106	106	Music Theory-Actors I	TH	Theatre	2	Introduces basics of rhythm, melody, sight-singing, and musical theatre piano in a group class.	UG	LL	Lecture/Lab Combination
Spring 2008	TH107	107	Music Theory Actors-II	TH	Theatre	2	Second term of course covering basics of rhythm, melody, sight-singing, and musical theatre piano in a group class.	UG	LL	Lecture/Lab Combination
Spring 2008	TH108	108	Music Theory Actors III	TH	Theatre	2	Third term of course covering basics of rhythm, melody, sight-singing, and musical theatre piano in a group class.	UG	LL	Lecture/Lab Combination
Spring 2008	TH110	110	Theatre Mgmt Activities	TH	Theatre	1	Participation in university theatre productions; specific assignments determined at initial meeting.	UG	LE	Lecture
Spring 2008	TH115	115	Singing for the Actor I	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH116	116	Singing for the Actors I	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH117	117	Singing for the Actor I	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination

Spring 2008	TH120	120	Make-Up for the Theatre	TH	Theatre	2	Theory and practice of stage makeup.	UG	LL	Lecture/Lab Combination
Spring 2008	TH124	124	Th Graphics I: Fundamntls	TH	Theatre	2	Drawing for the theatrical designer with emphasis on fundamentals.	UG	LL	Lecture/Lab Combination
Spring 2008	TH125	125	Theatre Graphics I: Media	TH	Theatre	2	Drawing for the theatrical designer with emphasis on media.	UG	LL	Lecture/Lab Combination
Spring 2008	TH126	126	Th Graphics I: Concepts	TH	Theatre	2	Drawing for the theatrical designer with emphasis on concepts.	UG	LL	Lecture/Lab Combination
Spring 2008	TH141	141	Acting Warmup	TH	Theatre	1	Physical and vocal training for freshmen acting majors. Graded pass/unsatisfactory.	UG	LL	Lecture/Lab Combination
Spring 2008	TH142	142	Acting Warmup	TH	Theatre	1	Physical and vocal training for freshmen acting majors. Graded pass/unsatisfactory.	UG	LL	Lecture/Lab Combination
Spring 2008	TH143	143	Acting Warmup	TH	Theatre	1	Physical and vocal training for freshmen acting majors, third term. Graded pass/unsatisfactory.	UG	LL	Lecture/Lab Combination
Spring 2008	TH144	144	Acting I	TH	Theatre	3	Training imagination, mind, body, and voice of the beginning actor.	UG	LL	Lecture/Lab Combination
Spring 2008	TH145	145	Acting I	TH	Theatre	3	Training imagination, mind, body, and voice of the beginning actor.	UG	LL	Lecture/Lab Combination

Spring 2008	TH146	146	Acting I	TH	Theatre	3	Training imagination, mind, body, and voice of the beginning actor.	UG	LL	Lecture/Lab Combination
Spring 2008	TH147	147	Acting Aesthetics	TH	Theatre	2	Generalized acting course that includes various aspects of movement, vocal technique, improvisation, and scene work. Designed for students who are emphasizing the technical areas of the arts. For technical design majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	TH148	148	Acting Aesthetics	TH	Theatre	2	Generalized acting course that includes various aspects of movement, vocal technique, improvisation, and scene work. Designed for students who are emphasizing the technical areas of the arts. For technical design majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	TH149	149	Acting Aesthetics	TH	Theatre	2	Generalized acting course that includes various aspects of movement, vocal technique, improvisation, and scene work. Designed for students who are emphasizing the technical areas of the arts. For technical design majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	TH157	157	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre acting majors.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH158	158	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre majors.	UG	LR	Lecture/Recitation Combination

Spring 2008	TH159	159	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre majors.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH200	200	Rehearsal & Performance	TH	Theatre	2	Student actors are directed by faculty in mainstage or studio theatre productions. May be repeated up to eight credits. Departmental permission and audition required.	UG	RE	Recitation
Spring 2008	TH202	202	Sound Design I	TH	Theatre	3	Introduction to the sound design and production processes, such as script analysis, artistic and aesthetic choices, equipment use/terminolgy, recording and assembly techniques.	UG	ST	Studio
Spring 2008	TH203	203	Contemporary Theatre	TH	Theatre	3	Critical study of contemporary theatre and its standards and production methods. Attendance at several current productions required. Theatre tickets must be purchased by the student.	UG	LE	Lecture
Spring 2008	TH210	210	Theatre Technology	TH	Theatre	3	Participation in the operation of a production shop. Introduces students to the fundamentals of theatre technology, emphasizing basic processes and materials. Participation in selected department productions required. For B.F.A. technology majors only.	UG	LB	Lab

Spring 2008	TH214	214	Theatre West Culture	TH	Theatre	4	Introduction to the many arts of the theatre including the roles of the actor, playwright, director, designer, critic, and audience. Selected scripts from representative historical periods are examined as an aid in understanding the theatrical event.	UG	LE	Lecture
Spring 2008	TH215	215	Singing for the Actor II	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH216	216	Singing for the Actor II	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH217	217	Singing for the Actor II	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH219	219	Stage Lighting I	TH	Theatre	3	The study of the aesthetics, processes and tools of theatrical lighting design. Emphasis on technical aspects of stage lighting, with an introduction to light design principles. Script analysis, research, color theory, equipment, design documentation.	UG	ST	Studio

Spring 2008	TH220	220	Stagecraft	TH	Theatre	3	Introduction to theory and practice of theatre technology with study of the materials and techniques involved. Includes practice in construction, mounting, and running of productions.	UG	LE	Lecture
Spring 2008	TH222	222	Theatre Production	TH	Theatre	2	Practical study of technical theatre technology with study of the materials and techniques involved. Includes practice in construction, mounting, and running of productions. May be repeated for maximum of nine credit hours applicable toward degree.	UG	LB	Lab
Spring 2008	TH224	224	Th Graphics II: Drafting	TH	Theatre	3	Introduction to and practice with the basic graphics tools, materials, and techniques used in drafting designs for the theatre.	UG	LL	Lecture/Lab Combination
Spring 2008	TH225	225	Theatre Graphics II: Color	TH	Theatre	3	Introduction to and practice with the basic color theories, materials, and techniques used in designing for the theatre.	UG	LL	Lecture/Lab Combination
Spring 2008	TH226	226	Th Graph II: Model Making	TH	Theatre	3	Introduction to and practice with the basic tools, materials, and techniques of scale model building for the theatre.	UG	LL	Lecture/Lab Combination

Spring 2008	TH228	228	Scenery Technology	TH	Theatre	3	In-depth study of scenery technology and its techniques. Involves the study of standard scenery construction, metalworking, and the application and details of stage rigging and its equipment. For B.F.A. technology majors only.	UG	LE	Lecture
Spring 2008	TH229	229	Fabric Dyeing and Mod	TH	Theatre	3	Introduction to basic techniques of dyeing and modifying fabric. Includes aging and distressing of costumes.	UG	LL	Lecture/Lab Combination
Spring 2008	TH238	238	Intro to Movement A	TH	Theatre	2	Introduction to beginning movement techniques for performers.	UG	ST	Studio
Spring 2008	TH239	239	Intro to Movement B	TH	Theatre	2	Introduction to beginning movement techniques for performers.	UG	ST	Studio
Spring 2008	TH240	240	Movement for the Actor I	TH	Theatre	2	Study of physical alignment, improvisation, warm-up methods, and exploration of movement dynamics as they relate to acting. Basic tumbling and pantomime techniques are introduced. For sophomore acting and acting-musical theatre majors only.	UG	LL	Lecture/Lab Combination

Spring 2008	TH241	241	Movement for the Actor I	TH	Theatre	2	Study of physical alignment, improvisation, warm-up methods, and exploration of movement dynamics as they relate to acting. Basic tumbling and pantomime techniques are introduced. For sophomore acting and acting-musical theatre majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	TH242	242	Movement for the Actor I	TH	Theatre	2	Study of physical alignment, improvisation, warm-up methods, and exploration of movement dynamics as they relate to acting. Basic tumbling and pantomime techniques are introduced. For sophomore acting and acting-musical theatre majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	TH244	244	Acting II	TH	Theatre	3	Second year of acting emphasizes character study. Emphasis on audition at the end of spring quarter.	UG	LL	Lecture/Lab Combination
Spring 2008	TH245	245	Acting II	TH	Theatre	3	Second year of acting emphasizes character study. Emphasis on audition at the end of spring quarter.	UG	LL	Lecture/Lab Combination
Spring 2008	TH246	246	Acting II	TH	Theatre	3	Second year of acting emphasizes character study. Emphasis on audition at the end of spring quarter.	UG	LL	Lecture/Lab Combination
Spring 2008	TH250	250	Script Analysis	TH	Theatre	4	This course offers students a variety of analytical methods for exploring a range of theatrical texts. Primary focus is on thematic, structural and formal aspects of analysis.	UG	LE	Lecture
Spring 2008	TH250W	250W	Writing in TH 250	TH	Theatre	0		UG	LB	Lab

Spring 2008	TH254	254	Theatre Speech I	TH	Theatre	2	Speech training focusing on expansion and strengthening of the actor's voice. Emphasis on clear articulation and proper enunciation of the phonemes of American standard English.	UG	LL	Lecture/Lab Combination
Spring 2008	TH255	255	Theatre Speech I	TH	Theatre	2	Speech training focusing on expansion and strengthening of the actor's voice. Emphasis on clear articulation and proper enunciation of the phonemes of American standard English.	UG	LL	Lecture/Lab Combination
Spring 2008	TH256	256	Theatre Speech I	TH	Theatre	2	Speech training focusing on expansion and strengthening of the actor's voice. Emphasis on clear articulation and proper enunciation of the phonemes of American standard English.	UG	LL	Lecture/Lab Combination
Spring 2008	TH257	257	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre acting majors.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH258	258	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre acting majors.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH259	259	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre acting majors.	UG	LR	Lecture/Recitation Combination

Spring 2008	TH301	301	Intro to Theatrical Desgn	TH	Theatre	3	Exploration of the collaborative process between director and designers, which results in a specific visual approach to a production. Emphasis on designer progression from script analysis and research to realization of the design.	UG	LE	Lecture
Spring 2008	TH302	302	Sound Design II	TH	Theatre	3	Advanced sound design. Topics include digital audio workstation and reinforcement techniques and technologies. Class work will rely on production and studio work and exploration of advances in the technology and art of sound design.	UG	ST	Studio
Spring 2008	TH304	304	Dramatic Writing	TH	Theatre	4	(Also listed as ENG 304.) Theory and practice of techniques of dramatic writing emphasizing writing of original plays.	UG	LL	Lecture/Lab Combination
Spring 2008	TH310	310	Theatre Arts Manag Prac	TH	Theatre	1	Participation in university theatre arts management activities. Specific assignments determined at initial meeting.	UG	LB	Lab
Spring 2008	TH311	311	Oral Reading of Drama	TH	Theatre	3	Analysis and practice in reading from plays and dramatic poetry; reader's theatre; performance.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH315	315	Singing for the Actor III	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination

Spring 2008	TH316	316	Singing for the Actor III	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH317	317	Singing for the Actor III	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH319	319	Stage Lighting II	TH	Theatre	3	Continuation of Stage Lighting I. Further exploration of lighting technology and design aesthetics for more complex productions such as multi-set shows, musicals, and dance. Use of computer programs for planning and communicating design ideas.	UG	ST	Studio
Spring 2008	TH320	320	Applied Theatre Tech I	TH	Theatre	4	Practical study in technical execution. Emphasis on daily operation of theatre production facilities and shops. Participation in all major department productions required. For B.F.A. design/technology majors only.	UG	LB	Lab
Spring 2008	TH321	321	Scene Painting I	TH	Theatre	3	Introduction to the materials and techniques used in traditional scenic painting, from basic skills (including graining, spattering, wet-blending) to the manipulation of light, shadow, and texture to create three-dimensional effects.	UG	LL	Lecture/Lab Combination

Spring 2008	TH322	322	Scene Painting II	TH	Theatre	3	Further development of the skills taught in Scene Painting I, with emphasis on rendering volume, light, and realistic surface texture. Includes working portraiture, foliage, and rendering of draped fabric.	UG	LL	Lecture/Lab Combination
Spring 2008	TH323	323	Scene Painting III	TH	Theatre	3	Continued work in trompe l'oeil techniques, emphasizing ability to reproduce accurately from source material. Introduction to the use of applied textures and painting translucencies.	UG	LL	Lecture/Lab Combination
Spring 2008	TH324	324	Lighting Design	TH	Theatre	3	Study of lighting design and the behavior of light as an expressive medium of theatrical design. Includes project work with an emphasis on professional technique.	UG	LL	Lecture/Lab Combination
Spring 2008	TH325	325	Set Design	TH	Theatre	3	Study of scenic design and the dynamics of stage space use. Includes project design work with an emphasis on professional technique and period design.	UG	LL	Lecture/Lab Combination
Spring 2008	TH326	326	Costume Design	TH	Theatre	3	Study of costume design for the theatre. Includes project design work with an emphasis on professional technique and period design.	UG	LL	Lecture/Lab Combination
Spring 2008	TH328	328	Decorative Style	TH	Theatre	3	Development of dominant characteristics of the history of architecture, furniture, and ornamental design and how they relate to abstract elements of taste, design, composition, and color.	UG	LE	Lecture

Spring 2008	TH329	329	Costume History	TH	Theatre	3	Costume and fashion from prehistoric to modern times. Overview of the history of costume and fashion and how it relates to theatre.	UG	LE	Lecture
Spring 2008	TH332	332	Automated Lighting	TH	Theatre	3	Introduction to automated lighting, with an emphasis on the skills needed to operate moving lights and effectively program consoles. Aesthetic and practical considerations regarding the use of moving lights in theatrical productions.	UG	ST	Studio
Spring 2008	TH333	333	Computer Graphics TH I	TH	Theatre	3	An introduction to the computer-aided drafting programs AutoCAD and VectorWorks. The student's basic skills are developed through several projects including orthographic projections, designer's elevations, groundplans and light plots.	UG	ST	Studio
Spring 2008	TH334	334	Stitching	TH	Theatre	3	This course introduces the costume student to advanced stitching techniques necessary for costume construction.	UG	ST	Studio
Spring 2008	TH335	335	Costume Crafts	TH	Theatre	3	This course introduces the student to creative, innovative, and often inexpensive alternatives for the creation of jewelry applique, embellishments, armor, crowns, and basic millinery techniques for theatrical production.	UG	ST	Studio

Spring 2008	TH336	336	Pattern Drafting & Draping	TH	Theatre	3	This course will cover the basic principles of pattern drafting, flat patterning, and draping of the female bodice.	UG	ST	Studio
Spring 2008	TH337	337	Mus Theatre Performance	TH	Theatre	3	Scene study class designed to integrate acting training with music and dance skills using major texts from musical theatre.	UG	LL	Lecture/Lab Combination
Spring 2008	TH338	338	Mus Theatre Performance	TH	Theatre	3	Scene study class designed to integrate acting training with music and dance skills using major texts from musical theatre.	UG	LL	Lecture/Lab Combination
Spring 2008	TH339	339	Mus Theatre Performance	TH	Theatre	3	Scene study class designed to integrate acting training with music and dance skills using major texts from musical theatre.	UG	LL	Lecture/Lab Combination
Spring 2008	TH340	340	Movement for Actor II	TH	Theatre	2	Basic movement skills such as period movement, dancing, and stage combat as they relate to performing; designed to give the performer total perception and to discover the physical and psychological stimulus for movement. For studio acting majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	TH341	341	Movement for Actor II	TH	Theatre	2	Basic movement skills such as period movement, dancing, and stage combat as they relate to performing; designed to give the performer total perception and to discover the physical and psychological stimulus for movement. For studio acting majors only.	UG	LL	Lecture/Lab Combination

Spring 2008	TH342	342	Movement for Actor II	TH	Theatre	2	Basic movement skills such as period movement, dancing, and stage combat as they relate to performing; designed to give the performer total perception and to discover the physical and psychological stimulus for movement. For studio acting majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	TH344	344	Acting III	TH	Theatre	3	First year of Professional Actor Training program. Must be taken in sequence. All students must receive a grade of "C"better to continue in sequence.	UG	LL	Lecture/Lab Combination
Spring 2008	TH345	345	Acting III	TH	Theatre	3	First year of Professional Actor Training program. Must be taken in sequence. All students must receive a grade of "C" better to continue in sequence.	UG	LL	Lecture/Lab Combination
Spring 2008	TH346	346	Acting III	TH	Theatre	3	First year of Professional Actor Training program. Must be taken in sequence. All students must receive a grade of "C" better to continue in sequence.	UG	LL	Lecture/Lab Combination
Spring 2008	TH347	347	One Person Show	TH	Theatre	3	Provides a foundation for the senior thesis project. Elements necessary in the development of a one person show will be taught, concluding in a solo performance.	UG	LL	Lecture/Lab Combination

Spring 2008	TH350	350	Directing	TH	Theatre	4	Problems of script selection and interpretation, casting, rehearsing, and performance. Techniques of composition and movement; the proscenium stage and open stage. Preparation of the prompt book.	UG	LL	Lecture/Lab Combination
Spring 2008	TH351	351	Stage Management	TH	Theatre	3	This course develops the skills required of the working stage manager. Through lecture, discussion, and application, students work problems of stage management through to practical solutions. Department permission required.	UG	LE	Lecture
Spring 2008	TH352	352	Directing Laboratory	TH	Theatre	2	Presentation of a one-act play in the studio theatre for departmental and public audiences.	UG	LL	Lecture/Lab Combination
Spring 2008	TH354	354	Theatre Speech II	TH	Theatre	2	Speech for the classical stage. Emphasis on unique demands of communication of dramatic verse text through exploration of Shakespeare, Molihre, and Restoration playwrights. Particular attention given to diction or the art of emphasis to illuminate poetic language.	UG	LL	Lecture/Lab Combination

Spring 2008	TH355	355	Theatre Speech II	TH	Theatre	2	Speech for the classical stage. Emphasis on unique demands of communication of dramatic verse text through exploration of Shakespeare, Molihre, and Restoration playwrights. Particular attention given to diction or the art of emphasis to illuminate poetic language.	UG	LL	Lecture/Lab Combination
Spring 2008	TH356	356	Theatre Speech II	TH	Theatre	2	Speech for the classical stage. Emphasis on unique demands of communication of dramatic verse text through exploration of Shakespeare, Molihre, and Restoration playwrights. Particular attention given to diction or the art of emphasis to illuminate poetic language.	UG	LL	Lecture/Lab Combination
Spring 2008	TH357	357	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre acting majors.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH358	358	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre acting majors.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH359	359	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre acting majors.	UG	LR	Lecture/Recitation Combination

Spring 2008	TH360	360	History of the Theatre I	TH	Theatre	3	Survey of the history and development of theatrical production from the Greeks through the renaissance and including primitive forms both ancient and contemporary. Emphasis on the history of play production rather than on literature.	UG	LE	Lecture
Spring 2008	TH361	361	History of the Theatre II	TH	Theatre	3	Survey of the history and development of theatrical production from the 17th century through the present day. Emphasis on the history of play production.	UG	LE	Lecture
Spring 2008	TH365	365	Theory and Criticism	TH	Theatre	3	Changing concepts of dramatic structure and criticism through comparative examination of works of selected playwrights and critics. Chief theories of dramatic production in relation to aesthetic principles.	UG	LE	Lecture
Spring 2008	TH366	366	Theatre Repertoire I	TH	Theatre	3	Special problems of analysis, acting, and staging plays from various periods of theatre history are explored from a production point of view. From Aeschylus to Jonson.	UG	LE	Lecture
Spring 2008	TH367	367	Theatre Repertoire II	TH	Theatre	3	Special problems of analysis, acting, and staging plays from various periods of theatre history are explored from a production point of view. From Beaumont to Chekhov.	UG	LE	Lecture

Spring 2008	TH368	368	Theatre Repertoire III	TH	Theatre	3	Special problems of analysis, acting, and staging plays from various periods of theatre history are explored from a production point of view. From Shaw to Albee.	UG	LE	Lecture
Spring 2008	TH370	370	Creative Dynamics	TH	Theatre	3	Study of the nature of creativity in children and of the techniques that develop sensitivity, bodily freedom, characterization, and impression.	UG	LL	Lecture/Lab Combination
Spring 2008	TH371	371	Mus Th Score & Lib Analys	TH	Theatre	2	Examines a variety of complete texts from the musical theatre to develop music and text analysis skills for acting, directing, or choreography.	UG	LE	Lecture
Spring 2008	TH372	372	Mus Theatre Hst & Lit	TH	Theatre	3	Survey of the history and literature of the musical theatre from opera and operetta through contemporary broadway productions. Examination of the various popular influences on the form. Includes viewing film and videotaped productions.	UG	LE	Lecture
Spring 2008	TH372W	372W	Writing in TH 372	TH	Theatre	0		UG	LB	Lab

Spring 2008	TH373	373	Mus Theatre Hst & Lit II	TH	Theatre	3	Survey of the history and literature of the musical theatre from opera and operetta through contemporary broadway productions. Examination of the various popular influences on the form. Includes viewing film and videotaped productions.	UG	LE	Lecture
Spring 2008	TH373W	373W	Writing in TH 373	TH	Theatre	0		UG	LB	Lab
Spring 2008	TH375	375	Theatre Management	TH	Theatre	3	Operational procedures for school, community, and professional theatre. Includes problems of organization, personnel, budgeting, purchasing, accounting, ticket sales, publicity, promotion, and house management.	UG	LE	Lecture
Spring 2008	TH376	376	Design Studio	TH	Theatre	2	Study of theatrical costume, scenery, lighting and sound design. Includes theoretical design work, and practical design work with an emphasis in the area of interest.	UG	LL	Lecture/Lab Combination
Spring 2008	TH380	380	Theatre History/Lit. I	TH	Theatre	3	This course offers students a variety of analytical methods for exploring a range of theatrical texts. Primary focus is on thematic, structural and formal aspects of analysis.	UG	LE	Lecture
Spring 2008	TH381	381	Theatre History/Lit. II	TH	Theatre	3	This course offers students a variety of analytical methods for exploring a range of theatrical texts. Primary focus is on thematic, structural and formal aspects of analysis.	UG	LE	Lecture

Spring 2008	TH381W	381W	Writing in TH 381	TH	Theatre	0		UG	LB	Lab
Spring 2008	TH382	382	Theatre History/Lit.III	TH	Theatre	3	Exploration of theatre from post-WWII to the present, within social and historical contexts. Emphasis on production practice and its effect on subsequent periods.	UG	LE	Lecture
Spring 2008	TH382W	382W	Writing in TH 382	TH	Theatre	0		UG	LB	Lab
Spring 2008	TH390	390	Projects in Theatre	TH	Theatre	2	Advanced individual work.	UG	LE	Lecture
Spring 2008	TH399	399	Studies in Selected Subj	TH	Theatre	1	Course of variable content dealing with problems, approaches, and topics in the field of theatre.	UG	IS	Independent Study
Spring 2008	TH399W	399W	Writing in TH 399	TH	Theatre	0		UG	LB	Lab
Spring 2008	TH410	410	Stage Management Practicum	TH	Theatre	1	Participation in university theatre stage management activities. Specific assignments determined at initial meeting.	UG	LB	Lab
Spring 2008	TH412	412	Advanced Stage Makeup	TH	Theatre	3	Design and application of the advanced makeup techniques of prothestics, hair ventilation and wig making.	UG	LL	Lecture/Lab Combination
Spring 2008	TH413	413	The Acting Profession	TH	Theatre	3	Provides intensive study and practical projects to prepare for a professional acting career. Agents, unions, auditions, markets (NYC, L.A., Chicago, etc.), and marketing tools (headshots, resumes, etc.) will be covered.	UG	LL	Lecture/Lab Combination

Spring 2008	TH415	415	Singing for the Actor IV	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH416	416	Singing for the Actor IV	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH417	417	Singing for the Actor IV	TH	Theatre	1	For acting majors only. All students must have auditioned for and received departmental approval before registering for this class.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH419	419	Stage Lighting III	TH	Theatre	3	Advanced study of lighting design for theatre, opera, dance and other theatrical genres. Emphasis on discussion and critique of actualized productions. Students complete design projects that improve upon script analysis, research, and presentation skills.	UG	ST	Studio
Spring 2008	TH420	420	Applied Theatre Tech II	TH	Theatre	2	Intensive study of selected aspects of technical theatre. Titles vary.	UG	LB	Lab
Spring 2008	TH423	423	Costume Design II	TH	Theatre	3	Advanced study of costume design. Students will complete projects that illustrate inspiration, illustration, planning, designing and presentation. There will be group discussion and critique of individual projects.	UG	ST	Studio

Spring 2008	TH424	424	Advanced Design Studio I	TH	Theatre	4	Intensive study of theatrical costumes, scenery, and lighting with a focus on script interpretation. Includes practical design work with an emphasis on produced designs, professional development, and specialization in the students' area of design.	UG	LL	Lecture/Lab Combination
Spring 2008	TH425	425	Advanced Design Studio II	TH	Theatre	4	Intensive study of theatrical costumes, scenery, and lighting with a focus on script interpretation. Includes practical design work with an emphasis on produced designs, professional development, and specialization in the students' area of design.	UG	LL	Lecture/Lab Combination
Spring 2008	TH426	426	Advanced Design Studio III	TH	Theatre	4	Intensive study of theatrical costumes, scenery, and lighting with a focus on script interpretation. Includes practical design work with an emphasis on produced designs, professional development, and specialization in the students' area of design.	UG	LL	Lecture/Lab Combination
Spring 2008	TH427	427	Advanced Stagecraft	TH	Theatre	3	Advanced study of stagecraft practices including complex scenery layout, rigging, power drive systems, and materials. For B.F.A. design/technology majors only.	UG	LE	Lecture

Spring 2008	TH428	428	Advanced Costume Technology	TH	Theatre	3	Advanced techniques of costume technology with emphasis on developing patterns, cutting and draping and drafting.	UG	LE	Lecture
Spring 2008	TH429	429	Advanced Theatre Crafts	TH	Theatre	3	Lecture/workshop class with variable topics including property and furniture building, scenic painting, welding, draping, etc. Topics vary.	UG	LE	Lecture
Spring 2008	TH433	433	Computer Graphics TH II	TH	Theatre	3	An introduction to the photo manipulation program PhotoShop. Through the use of existing images and original designed, the student will explore the various techniques available to produce paint elevations, projections, and theatrical designs.	UG	ST	Studio
Spring 2008	TH434	434	Rigging	TH	Theatre	3	The student will learn how to design and use rigging systems in theatrical settings. Emphasis will be placed on proper selection and use of rigging hardware and equipment, and fall protection.	UG	ST	Studio
Spring 2008	TH435	435	Portofolio Prep & Pres	TH	Theatre	3	Designed to prepare upper-division students for the transition into the professional world. Portofolio formats, both traditional and digital, will be investigated. Effective techniques for the presentation of portfolios and employment strategies will be stressed.	UG	ST	Studio

Spring 2008	TH436	436	Graphics III Rendering	TH	Theatre	3	Further development of skills used in creating theatrical renderings, costume plates, and lighting sketches. Emphasis on figure drawing, depicting light and shadow, and exploration of traditional and non-traditional media and techniques.	UG	ST	Studio
Spring 2008	TH437	437	Musical Theatre Studies	TH	Theatre	3	Study of the performance problems associated with a selected composer or genre. Topics vary.	UG	LL	Lecture/Lab Combination
Spring 2008	TH438	438	Mus Thr Thesis Rehearsal	TH	Theatre	3	Preparation of the musical theatre thesis including the technical and production needs for the special thesis production.	UG	RE	Recitation
Spring 2008	TH439	439	Musical Theatre Thesis	TH	Theatre	3	Performance(s) of specially created theatre piece utilizing all musical theatre emphasis majors. This performance may serve as a showcase for theatrical agents and professional casting personnel.	UG	RE	Recitation
Spring 2008	TH440	440	Movement for Actor III	TH	Theatre	2	Visualizing techniques along with specific analysis of the ideas of LeCoq, Marceau, Alexander, Davis, and others. For B.F.A. studio acting majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	TH441	441	Movement for Actor III	TH	Theatre	2	Visualizing techniques along with specific analysis of the ideas of LeCoq, Marceau, Alexander, Davis, and others. For B.F.A. studio acting majors only.	UG	LL	Lecture/Lab Combination

Spring 2008	TH442	442	Movement for Actor III	TH	Theatre	2	Visualizing techniques along with specific analysis of the ideas of LeCoq, Marceau, Alexander, Davis, and others. For B.F.A. studio acting majors only.	UG	LL	Lecture/Lab Combination
Spring 2008	TH444	444	Acting IV	TH	Theatre	3	Second year of Professional Actor Training program.	UG	LL	Lecture/Lab Combination
Spring 2008	TH445	445	Acting IV	TH	Theatre	3	Second year of Professional Actor Training program.	UG	LL	Lecture/Lab Combination
Spring 2008	TH446	446	Acting IV	TH	Theatre	3	Second year of Professional Actor Training program.	UG	LL	Lecture/Lab Combination
Spring 2008	TH447	447	Acting Thesis Project	TH	Theatre	3	Intensive work on a final creative performance project. For senior acting studio majors only. Graded pass/unsatisfactory.	UG	RE	Recitation
Spring 2008	TH448	448	Acting Thesis Project	TH	Theatre	3	Intensive work on a final creative performance project. Open only to acting studio seniors.	UG	RE	Recitation
Spring 2008	TH450	450	Studies in Directing	TH	Theatre	3	Provides intensive study of selected aspects of directing for the theatre. Titles vary.	UG	LL	Lecture/Lab Combination
Spring 2008	TH451	451	Directing Thesis Project	TH	Theatre	3	Original directed research culminating in a creative performance project. For B.F.A. directing majors only.	UG	LB	Lab

Spring 2008	TH452	452	Directing Thesis Project	TH	Theatre	3	Original directed research culminating in a creative performance project. For B.F.A. directing majors only.	UG	LB	Lab
Spring 2008	TH454	454	Theatre Speech III	TH	Theatre	2	Thorough analysis and study of sounds of foreign dialects and regional accents. Students explore transformation of their own voices. Students also learn to vary their stage voices for age and character roles.	UG	LL	Lecture/Lab Combination
Spring 2008	TH455	455	Theatre Speech III	TH	Theatre	2	Thorough analysis and study of sounds of foreign dialects and regional accents. Students explore transformation of their own voices. Students also learn to vary their stage voices for age and character roles.	UG	LL	Lecture/Lab Combination
Spring 2008	TH456	456	Theatre Speech III	TH	Theatre	2	Thorough analysis and study of sounds of foreign dialects and regional accents. Students explore transformation of their own voices. Students also learn to vary their stage voices for age and character roles.	UG	LL	Lecture/Lab Combination
Spring 2008	TH457	457	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre acting majors.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH458	458	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre acting majors.	UG	LR	Lecture/Recitation Combination
Spring 2008	TH459	459	Singing-Musical Theatre	TH	Theatre	2	Private singing lessons for musical theatre acting majors.	UG	LR	Lecture/Recitation Combination

Spring 2008	TH460	460	Studies in Theatre History	TH	Theatre	3	Courses offered under this title provide an intensive study of a selected aspect of theatre history. Exact title announced each time the course is offered.	UG	LE	Lecture
Spring 2008	TH470	470	Studies in Child Drama	TH	Theatre	3	Couses offered under this title provide an intensive study of a selected aspect of child drama. Exact title announced each time the course is offered.	UG	LL	Lecture/Lab Combination
Spring 2008	TH491	491	Seminar in Theatre	TH	Theatre	3		UG	SE	Seminar
Spring 2008	TH495	495	Workshop in Theatre	TH	Theatre	3	Intensive study of special topics or problems, or intensive experience in theatrical presentation according to particular needs of participants. Titles vary.	UG	LE	Lecture
Spring 2008	TH498	498	Prof Theatre Internship	TH	Theatre	12	Placement of superior upper-division B.F.A. theatre majors in various professional theatres as management or production interns. For B.F.A. theatre majors only.	UG	IN	Internship
Spring 2008	TH695	695	Workshop in Theatre	TH	Theatre	3	Intensive study of selected special topics or problems or intensive experience in theatrical presentations designed to meet the particular needs of participating students. Specific titles to be announced for each workshop. May be repeated for credit subject to departmental, divisional, and university limits.	GR	LE	Lecture

Spring 2008	TMG202	202	Labor Relations	TMG	Technical Management	3	Consideration of the practicies, principles and organization of collective bargaining. Study ot the techniques of mediation and the agencies involved in mediation. Causes and cures of labor disputes.	UG	LE	Lecture
Spring 2008	TMG204	204	Fundamentals Management	TMG	Technical Management	4	Basic fundamentals of the process of management applied to business organizations. Emphasis on the practical applications of techniques employed by managers at lower and middle organizational levels.	UG	LE	Lecture
Spring 2008	TMG210	210	Personnel Management	TMG	Technical Management	3	Study of the characteristics, purposes, objectives, and techniques of supervision and coordination of the work of others. Discussions include employment interviewing, training procedures, supervision, and improvement of huma relations.	UG	LE	Lecture
Spring 2008	TMG225	225	Office Procedures II	TMG	Technical Management	3		UG	LL	Lecture/Lab Combination
Spring 2008	TMG240	240	Wage and Salary Administration	TMG	Technical Management	3	An analysis of job evaluation for salary and hourly positions, job designs, compensation structures, and fringe benefit and retirement fund administration.	UG	LE	Lecture

Spring 2008	TMG250	250	Purchasing	TMG	Technical Management	3	Composition of a buy office, buying the right quality from the right vendor, buying to support inventory control, make versus buy philosophy, and some legal aspects of buying.	UG	LE	Lecture
Spring 2008	TMG270	270	Production Management	TMG	Technical Management	3	Introduction to the functions making up the production system, includiong product parts manufacture, process routing, quality standards, work measurement, work methods, scheduling, and inventory control.	UG	LE	Lecture
Spring 2008	TMG280	280	Small Business Management	TMG	Technical Management	3	Stresses business management functions important to small businesses, including single ownership, partnership, incorporation, capitalization and financing requirements, legal requirements, production, and marketing arrangements.	UG	LE	Lecture
Spring 2008	TMG290	290	Comprehensive Management	TMG	Technical Management	4	A capstone course designed to intergrate the student's two-year program into a cohesive management program and to promote management problem solving capabilities.	UG	LE	Lecture
Spring 2008	TMG295	295	Independent Study	TMG	Technical Management	1	Directed Study on selected topics.	UG	IS	Independent Study

Spring 2008	TMG297	297	Studies in Selected Subjects	TMG	Technical Management	1	Course of variable content dealing with problems, approaches, and topics in the field management. May be taken as often as topics vary.	UG	LE	Lecture
Spring 2008	TMG299	299	Internship	TMG	Technical Management	4	Practical business experience in management for qualified students under the joint planning and coordination of faculty, student, and business representatives. Completion of 60 hours of course work required.	UG	IN	Internship
Spring 2008	TMK200	200	Basic Marketing	TMK	Technical Marketing	4	Study of the functions of marketing in the American business system with emphasis on economic and social determinants.	UG	LE	Lecture
Spring 2008	TMK202	202	Basic Marketing II	TMK	Technical Marketing	3	Practical evaluation of marketing functions relative to the product development promotion, pricing, distribution, and establishing marketing objectives.	UG	LE	Lecture
Spring 2008	TMK210	210	Promotion	TMK	Technical Marketing	3	Use of personal selling, sales promotion and advertising techniques.	UG	LE	Lecture
Spring 2008	TMK220	220	Retailing	TMK	Technical Marketing	3	Study of the marketing functions at the retail level. Emphasis on institutional practices at various types of retail establishments.	UG	LE	Lecture

Spring 2008	TMK228	228	Retail Management	TMK	Technical Marketing	3	Concentrates on merchandise management and retail control. Includes application of buying procedures and analysis of current merchandising policies.	UG	LE	Lecture
Spring 2008	TMK240	240	Salesmnshp & Sales Supervision	TMK	Technical Marketing	3	An analysis of personal skills essential to successful selling. An understanding of the personal characteristics and merchandising knowledge necessary for customer development are discussed. Mass and personalized methods of sales supervision are considered.	UG	LE	Lecture
Spring 2008	TMK290	290	Comprehensive Marketing	TMK	Technical Marketing	4	A capstone course designed to integrate the student's two-year program into a cohesive marketing program and to promote marketing problem solving capabilities.	UG	LE	Lecture
Spring 2008	TMK295	295	Independent Study	TMK	Technical Marketing	1	Directed study on selected topics.	UG	IS	Independent Study
Spring 2008	TMK297	297	Studies in Selected Subjects	TMK	Technical Marketing	1	Course of variable content dealing with problems, approaches, and topics in the field marketing. May be taken as often as topics vary.	UG	LE	Lecture

Spring 2008	TMK299	299	Internship	TMK	Technical Marketing	4	Practical business in retail marketing for qualified students under the joint planning and coordination of faculty, students, and business representatives. Completion of 60 hours course work required.	UG	IN	Internship
Spring 2008	TMT113	113	Technical Mathematics I	TMT	Technical Mathematics	4	Course includes an introduction to the real number system, operations with signed numbers, solving first degree equations, products and factoring of monomials and polynomials, working with solving equations, radicals, and an introduction to right triangular trigonometry. Prerequisiste: Sufficient score on the math placement test.	UG	LE	Lecture
Spring 2008	TMT114	114	Technical Mathematics II	TMT	Technical Mathematics	4	Course includes work with vectors; j operator logarithmic functions, solving equations, inequalities, properties of the trigonometric functions, and variations. Prerequisite: TMT 113.	UG	LE	Lecture
Spring 2008	TMT115	115	Technical Math III	TMT	Technical Mathematics	4		UG	LE	Lecture

Spring 2008	TMT116	116	Technical Calculus	TMT	Technical Mathematics	4	Introduces topics of calculus such as limits, derivative and applications, integration and applications, differentiation of transcendental functions, and methods of integration. Prerequisite: TMT 115.	UG	LE	Lecture
Spring 2008	TOA101	101	Professional Devel I	TOA	Technical Office Admin	1	Emphasizes professional development in office procedures, dress, personality, leadership, and other aspects of business etiquette.	UG	LE	Lecture
Spring 2008	TOA102	102	Professional Devel II	TOA	Technical Office Admin	1	Emphasizes professional development in office procedures, dress, personality, leadership, and other aspects of business etiquette.	UG	LE	Lecture
Spring 2008	TOA103	103	Professional Devel III	TOA	Technical Office Admin	1	Emphasizes professional development in office procedures, dress, personality, leadership, and other aspects of business etiquette.	UG	LE	Lecture
Spring 2008	TOA104	104	Professional Devel IV	TOA	Technical Office Admin	1	Emphasizes professional development in office procedures, dress, personality, leadership, and other aspects of business etiquette.	UG	LE	Lecture
Spring 2008	TOA105	105	Professional Devel V	TOA	Technical Office Admin	1	Emphasizes professional development in office procedures, dress, personality, leadership, and other aspects of business etiquette.	UG	LE	Lecture
Spring 2008	TOA106	106	Professional Devel VI	TOA	Technical Office Admin	1	Emphasizes professional development in office procedures, dress, personality, leadership, and other aspects of business etiquette.	UG	LE	Lecture

Spring 2008	TOA110	110	Keyboarding	TOA	Technical Office Admin	1	Basic keyboarding instruction in touch typewriting on an alphanumeric key board.	UG	LE	Lecture
Spring 2008	TOA111	111	Speedwriting I	TOA	Technical Office Admin	3	Covers skills in writing and reading alphabetic shorthand with emphasis on diction and transcription.	UG	LE	Lecture
Spring 2008	TOA112	112	Speedwriting II	TOA	Technical Office Admin	3	Continuation of TOA 111 and Speedwriting I, with emphasis on speed and production of documents.	UG	LE	Lecture
Spring 2008	TOA115	115	Business/Office Correspon	TOA	Technical Office Admin	3	Study of terminology and formats used in business communication: letters, reports, memos, diction, grammar fundamentals, sentence construction, punctuation rules, and spelling.	UG	LE	Lecture
Spring 2008	TOA200	200	Software Applications	TOA	Technical Office Admin	3	Study of computer skills by utilizing various software packages for legal, medical, and administrative office applications. Two hours lecture, 2 hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TOA205	205	Presentation Skills	TOA	Technical Office Admin	3	Professional speaking and electronic presentation skills will be developed using various software packages. Students will understand how to choose and create the most appropriate multimedia method for delivery of the message.	UG	LE	Lecture

Spring 2008	TOA210	210	Job Search/Portfolio Dev	TOA	Technical Office Admin	4	An exploration of job hunting skills, resume writing, interviewing techniques, and proper employment seeking skills. Sophomore standing required.	UG	LE	Lecture
Spring 2008	TOA223	223	Word Process Simulations	TOA	Technical Office Admin	3	Simulations in work processing functions using merge, list processing, math and sort. Covers medical, legal, and executive situations. Six hours lab.	UG	LB	Lab
Spring 2008	TOA224	224	Office Procedures I	TOA	Technical Office Admin	3	Integrates the development of operational functions and decision-making competencies. Simulations in executive, medical, and legal procedures including experiences in telephone and communication techniques, word processing, and administrative services.	UG	LE	Lecture
Spring 2008	TOA225	225	Office Procedures II	TOA	Technical Office Admin	3	Continuation of TOA 204.	UG	LE	Lecture
Spring 2008	TOA226	226	Office Procedures III	TOA	Technical Office Admin	3	Continuation of TOA 225.	UG	LE	Lecture
Spring 2008	TOA230	230	Records Management	TOA	Technical Office Admin	3	Filing systems and procedures. Combines technical aspects of records technique with sound principles of management.	UG	LE	Lecture
Spring 2008	TOA231	231	Office Management	TOA	Technical Office Admin	3	Office organization; emphasis on work flow, proper equipment, problems in supervision, human relations, and management techniques.	UG	LE	Lecture

Spring 2008	TOA233	233	Machine Transcription I	TOA	Technical Office Admin	3	Executive, medical, and legal transcription from cassettes, emphasizing skills needed in today's work processing environment. Two hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TOA234	234	Machine Transcription II	TOA	Technical Office Admin	3	Continuation of TOA 233 including executive, medical, and legal projects. Two hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TOA235	235	Calculator Applications	TOA	Technical Office Admin	3	Operation of electronic display and printing calculators with business math and office applications. Two hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TOA241	241	Desktop Publishing I	TOA	Technical Office Admin	3	Business course using a computer graphic design system to produces typeset-quality text and graphics such as newsletters, letterheads, brochures, and manuals. Two hours lecture, two hours lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TOA242	242	Desktop Publishing II	TOA	Technical Office Admin	3	Continuation of TOA 241 using more advanced features and applications of graphics and software programs. Two hours lecture, two hour lab.	UG	LL	Lecture/Lab Combination
Spring 2008	TOA243	243	Desktop Publishing III	TOA	Technical Office Admin	3	An overview of desktop publishing systems using advanced concepts and terminology. Study of the principles of design and the publishing cycle. One hour lecture, 4 hours lab.	UG	LL	Lecture/Lab Combination

Spring 2008	TOA244	244	Advanced Desktop Publishing	TOA	Technical Office Admin	3	Continuation of TOA 243 covering basic news story and news writing format. The student will design and publish a newspaper using desktop publishing software and appropriate news writing techniques.	UG	LE	Lecture
Spring 2008	TOA250	250	Executive Terminology	TOA	Technical Office Admin	3	Study of executive terminology and other basic aspects of the executive assistant profession.	UG	LE	Lecture
Spring 2008	TOA251	251	Legal Terminology	TOA	Technical Office Admin	3	Study of legal terminology and other basic aspects ot the legal assistant profession.	UG	LE	Lecture
Spring 2008	TOA252	252	Medical Terminology	TOA	Technical Office Admin	3	Study of medical terminology and other basic aspects ot the medical assistant profession.	UG	LE	Lecture
Spring 2008	TOA253	253	Medical Terminology II	TOA	Technical Office Admin	3	Continuation of TOA 252. Covers basic vocabulary utilized in medical office.	UG	LE	Lecture
Spring 2008	TOA255	255	Medical Coding	TOA	Technical Office Admin	3	Study of medical skills in CPT coding for insurance and medical documents using referance manuals and computer software.	UG	LE	Lecture
Spring 2008	TOA256	256	Medical Coding II	TOA	Technical Office Admin	3		UG	LE	Lecture
Spring 2008	TOA295	295	Independent Study	TOA	Technical Office Admin	1	Directed study on selected topics.	UG	IS	Independent Study
Spring 2008	TOA297	297	Studies in Selected Subjects	TOA	Technical Office Admin	1	Problems, approaches, and topics in the field of office administration. May be taken for letter grade or pass/unsatisfactory. Titles vary.	UG	LE	Lecture

Spring 2008	TOA299	299	Internship	TOA	Technical Office Admin	4	Practical secretarial experience under the joint planning and coordination of faculty, student, and business representative. Completion of 60 hours of course work required. May be taken for a letter grade of pass/unsatisfactory.	UG	IN	Internship
Spring 2008	TSS051	051	Reading Comprehension I	TSS	Technical Study Skills	1	Emphasis will be placed on improving reading skills, comprehension, concetration, and related vocabulary development. This will be accomplished by utilizing individualized instruction in sequenced kits and other related materials.	UG	LE	Lecture
Spring 2008	TSS052	052	Reading Comprehension II	TSS	Technical Study Skills	1	Continuation of TSS 051. Emphasis will be placed on improving reading skills, comprehension, concetration, and related vocabulary development. This will be accomplished by utilizing individualized instruction in sequenced kits and other related materials.	UG	LE	Lecture

Spring 2008	TSS061	061	Vocabulary Development I	TSS	Technical Study Skills	1	THis is an individualized course which allows students to proceed at their own pace (within reason as stipulated by the instructor) and provides students with one on one instruction to enhance their individual needs whether it is to develop a "working vocabulary" needed to succeed in other courses presently enrolled in or those to be taken in the future. Students work toward improved vocabulary, concentrating on techniques of unlocking meaning through contextual clues and knowledge of Latin and Greek roots, prefixes and suffixes. Students will also formulate data retention cards to master specific or general vocabulary of a discipline/course.	UG	LE	Lecture

Spring 2008	TSS062	062	Vocabulary Development II	TSS	Technical Study Skills	1	Continuation of TSS 061. This is an individualized course which allows students to proceed at their own pace (within reason as stipulated by the instructor) and provides students with one on one instruction to enhance their individual needs whether it is to develop a "working vocabulary" needed to succeed in other courses presently enrolled in or those to be taken in the future. Students work toward improved vocabulary, concentrating on techniques of unlocking meaning through contextual clues and knowledge of Latin and Greek roots, prefixes and suffixes. Students will also formulate data retention cards to master specific or general vocabulary of a discipline/course.	UG	LE	Lecture

Spring 2008	TSS071	071	Speed REading I	TSS	Technical Study Skills	1	This course is designed to satisfy individual needs of college students interested in enhancing their ability to become more flexible reader regardless of their major or discipline of study. Emphasis will be placed on refining reading skills, improving rate, comprehension and efficiency. Individual improvement will be the goal with no limits as to how much a student may improve in his/her ability to read. This course is recommended only for those students who already read adequately, but desire techniques which will decrease the amount of time spent in reading and help determine at what rate different materials should be read.	UG	LE	Lecture

Spring 2008	TSS072	072	Speed REading II	TSS	Technical Study Skills	1	This course is designed to satisfy individual needs of college students interested in enhancing their ability to become more flexible reader regardless of their major or discipline of study. Emphasis will be placed on refining reading skills, improving rate, comprehension and efficiency. Individual improvement will be the goal with no limits as to how much a student may improve in his/her ability to read. This course is recommended only for those students who already read adequately, but desire techniques which will decrease the amount of time spent in reading and help determine at what rate different materials should be read.	UG	LE	Lecture
Spring 2008	UH101	101	Directed Study	UH	University Honors	1	Faculty-directed research or reading.	UG	SE	Seminar
Spring 2008	UH201	201	Studies in Humanities	UH	University Honors	3	Explores the humanities comparatively, stressing similarities and differences in themes, methods, materials, theoretical constructs, and problems. Focuses on such topics as humanity and freedom or the city and the individual.	UG	SE	Seminar
Spring 2008	UH201W	201W	Writing in UH 201	UH	University Honors	0	Required writing component for UH 201.	UG	LB	Lab

Spring 2008	UH202	202	Studies in Social Sciences	UH	University Honors	3	Explores the social sciences comparatively, stressing similarities and differences in themes, methods, materials, theoretical constructs, and problems. Focuses on such topics as people and groups or institutions and bureaucracies.	UG	SE	Seminar
Spring 2008	UH202W	202W	Writing in UH 202	UH	University Honors	0	Required writing component for UH 202.	UG	LB	Lab
Spring 2008	UH203	203	Studies in the Natural Science	UH	University Honors	4	Varying topics or issues in the natural sciences approached in an interdisciplinary framework. Course permits intensive coverage of subject matter while also focusing on the interrelationships of the natural scientific disciplines.	UG	SE	Seminar
Spring 2008	UH203W	203W	Writing in UH 203	UH	University Honors	0		UG	LB	Lab
Spring 2008	UH400	400	Honors	UH	University Honors	3	Emphasis on broadly interdisciplinary topics or issues. Topics vary.	UG	SE	Seminar
Spring 2008	UH400W	400W	Writing in UH 400	UH	University Honors	0	Required writing component for UH 400.	UG	LB	Lab
Spring 2008	URS199	199	Philanthropy-Grantmaking	URS	Urban Affairs	2	This hands-on course exposes students to effective grantmaking strategies, an essential component of the philanthropic process. It is a 2-credit hour course on philanthropy.	UG	LE	Lecture

Spring 2008	URS200	200	Grow/Change Urb Society	URS	Urban Affairs	4	An interdisciplinary view of growth and change in urban societies around the globe. Case studies illustrate how urbanization, technology development and the administrative state intertwine and affect economic and population growth and change.	UG	LE	Lecture
Spring 2008	URS200W	200W	Writing in URS 200	URS	Urban Affairs	0	Required writing component for URS 200.	UG	LB	Lab
Spring 2008	URS300	300	Philanthropy-Fundraising	URS	Urban Affairs	2	This hands-on course exposes students to effective fundraising strategies, an essential component of the philanthropic. It is the first course in a sequence of two, 2-credit hour courses on philanthropy.	UG	LL	Lecture/Lab Combination
Spring 2008	URS301	301	Philanthropy-Grantmaking	URS	Urban Affairs	2	This hands-on course exposes students to effective grantmaking strategies, an essential component of the philanthropic. It is the second course in a sequence of two, 2-credit hour courses on philanthropy.	UG	LE	Lecture
Spring 2008	URS311	311	Intro to Urban Affairs	URS	Urban Affairs	4	Interdisciplinary introduction to general field of urban affairs. Reviews idea of the city and meaning of urban life.	UG	LE	Lecture
Spring 2008	URS311W	311W	Writing in URS 311	URS	Urban Affairs	0	Required writing component for URS 311.	UG	LB	Lab

Spring 2008	URS316	316	American Urban History	URS	Urban Affairs	4	Urban history in its broadest sense from the ancient world to the present, providing historical perspective to the contemporary urban-metropolitan phenomenon and exploring how and why urban civilization came to be.	UG	LE	Lecture
Spring 2008	URS317	317	Urban Planning I: Intro	URS	Urban Affairs	4	(Also listed as GEO 317.) Examination of the development of city planning as a professional discipline. Consideration of the contributions ?to planning by the arts and sciences. Selected activities and functions of contemporary urban planning agencies are viewed from the perspective of current urban problems.	UG	LE	Lecture
Spring 2008	URS318	318	Urban Planning II: Princ	URS	Urban Affairs	4	(Also listed as GEO 318.) Includes the role of planning in urban structures, and duties and responsibilities of planning commissions; process of preparing comprehensive plans; population change, the economic base, and determinants of future urban structure.	UG	LE	Lecture
Spring 2008	URS321	321	City Politics	URS	Urban Affairs	4	(Also listed as PLS 321.) Governments and politics of metropolitan regions, government structure and functions, and interest and power relations.	UG	LE	Lecture

Spring 2008	URS345	345	Public Administration	URS	Urban Affairs	4	(Also listed as PLS 345.) Nature and scope of public administration; administrative law; and public interest in the administrative process.	UG	LE	Lecture
Spring 2008	URS346	346	Public Personnel Admin.	URS	Urban Affairs	4	(Also listed as PLS 346.) Methods of employment, training, compensation, and employee relations in various levels of civil service. Examines organizations of public employees.	UG	LE	Lecture
Spring 2008	URS399	399	Studies Selected Subjects	URS	Urban Affairs	4	Problems, approaches, and topics in the field of urban affairs. Topics vary.	UG	LE	Lecture
Spring 2008	URS401	401	Security Emergency Prepa	URS	Urban Affairs	1	Exploration of the potential threats and hazards facing public transit systems and procedures for mitigating risks. Offers guidelines for managing critical incidents and how to become an integral component of the Emergency Response Team.	UG	LE	Lecture
Spring 2008	URS410	410	Urban Empirical Research	URS	Urban Affairs	4	Introduces students to research and data collection methods used to explore and explain urban issues. Preparation course for URS 411 and students interested in empirical research. Investigates what makes research useful, valid, and ethical. Requires evaluating and developing research designs.	UG	LE	Lecture
Spring 2008	URS410W	410W	Writing in URS 410	URS	Urban Affairs	0		UG	LB	Lab

Spring 2008	URS411	411	Seminar in Urban Affairs	URS	Urban Affairs	4	Includes development of a major research paper and a bibliography in urban affairs.	UG	SE	Seminar
Spring 2008	URS411W	411W	Writing in URS 411	URS	Urban Affairs	0	Required writing component for URS 411.	UG	LB	Lab
Spring 2008	URS412	412	Cities and Technology	URS	Urban Affairs	4	Cities and technology deals with the evolving relationship between technology and urban growth, physical form, government, and politics. Explores how technological fixes for complex urban problems have shaped urban development and politics.	UG	LE	Lecture
Spring 2008	URS413	413	Legal Environment of PA	URS	Urban Affairs	4	Examines the constitutional context of public administration and administrative rulemaking. Topics include local rules and codes, the administrative appeals process, and sunshine and public records law.	UG	LE	Lecture
Spring 2008	URS414	414	Public Fiscal Admin	URS	Urban Affairs	4	Examines local fiscal institutions and introduces analytical tools for designing and evaluating fiscal policies. Reviews financial reporting and accounting, the municipal bond market, pension systems, state and local taxes, user charges, and intergovernmental relations.	UG	LE	Lecture

Spring 2008	URS415	415	Community Development I	URS	Urban Affairs	4	Focuses on the importance, the profession, and the practice of community development. Introduces theories of community and development and studies current neighborhood programs and policies.	UG	LE	Lecture
Spring 2008	URS416	416	Community Development II	URS	Urban Affairs	4	Examines three fundamental organizing strategies-self-help, technical assistance, and conflict-which are used to improve a community's quality of life. The course combines classroom learning and field observation.	UG	LE	Lecture
Spring 2008	URS417	417	Public Sector Labor Rela	URS	Urban Affairs	4	Examines collective bargaining, the negotiation process, impasse resolution, and contract and grievance administration in local government.	UG	LE	Lecture
Spring 2008	URS420	420	Public Safety Admin	URS	Urban Affairs	4	Policing, corrections, fire, emergency medical services, and emergency management systems will be surveyed to provide an understanding of the services offered, technologies used, problems faced, and alternatives available in each of the areas.	UG	LE	Lecture

Spring 2008	URS421	421	Comparative Public Admin	URS	Urban Affairs	4	Investigates changes in public administration in the USA and internationally that are caused by globalization and urbanization. The changes relate to organizational structure, functions, partnerships, and values.	UG	LE	Lecture
Spring 2008	URS423	423	Issues in Metro Admin	URS	Urban Affairs	4	Explores issues and topics related to the administration of urban nonprofit organizations, community development agencies, and local governments. Titles vary.	UG	LE	Lecture
Spring 2008	URS424	424	Issues in Metro Planning	URS	Urban Affairs	4	Examines various issues related to planning urban environments. Topics may include housing, funding nonprofit organizations, strategic planning, and economic development action plans.	UG	LE	Lecture
Spring 2008	URS425	425	Issues in Metro Develop	URS	Urban Affairs	4	Explores issues that impact metropolitan development such as pollution, the nonprofit sector, and transportation.	UG	LE	Lecture
Spring 2008	URS427	427	Urban Policy Analysis	URS	Urban Affairs	4	(Also listed as PLS 427.) Study of the policy development process and its relationship to past and current urban issues. The course focuses on a current urban issue through discussion, reading, and research.	UG	LE	Lecture

Spring 2008	URS446	446	Public Budgeting	URS	Urban Affairs	4	(Also listed as PLS 446.) Examination of the major phase of the governmental budget cycle, types of budget, budgetary reform, economic and public impact of government budgeting, decision-making process, and legislative/executive relations in budget formation and implementation.	UG	LE	Lecture
Spring 2008	URS450	450	Ethics in Public Serv	URS	Urban Affairs	4	Systematic development of ethics in public service, including individual roles and obligations, values, standards, and codes of conduct.	UG	LE	Lecture
Spring 2008	URS450W	450W	Writing in URS 450	URS	Urban Affairs	0		UG	LB	Lab
Spring 2008	URS470	470	Public & NP Leadership	URS	Urban Affairs	4	Examines the leadership role of the urban administrator in formulating programs, policies, and service delivery options. Explores topics such as managing the internal and external environments, improving productivity and effectiveness, and policy/program creation.	UG	LE	Lecture
Spring 2008	URS470W	470W	Writing in URS 470	URS	Urban Affairs	0	Required writing component for URS 470.	UG	LB	Lab

Spring 2008	URS475	475	Mgt of Urban Nonprofit	URS	Urban Affairs	4	Examines the organizational and managerial foundations of nonprofit organizations. Areas such as the nature and mission of nonprofit organizations, evaluating performance, resource development/fund-raising, and managing volunteers are explored.	UG	LE	Lecture
Spring 2008	URS476	476	Fundraising/Grant Write	URS	Urban Affairs	4	Examines the concepts and processes fundamental to fundraising and grant writing. Students learn about and use tools, techniques and skills needed to raise funds and write grant proposals.	UG	LE	Lecture
Spring 2008	URS476W	476W	Writing in URS 476	URS	Urban Affairs	0		UG	LB	Lab
Spring 2008	URS477	477	Philanthropy Urban Dev	URS	Urban Affairs	4	Introduction to the field of Philanthropy, its history and its place in democratic society. Students will be engaged in the practice and administration of philanthropic organizations.	UG	LE	Lecture
Spring 2008	URS478	478	Managing Volunteer Org	URS	Urban Affairs	4	Study of the knowledge and skills needed by individuals managing volunteers. Components include volunteer recruitment; training; motivation and retention; risk management; and volunteer program evaluation.	UG	LE	Lecture

Spring 2008	URS490	490	Special Topics	URS	Urban Affairs	1	Advanced study in selected topics in urban studies. Topics may include new developments in methodology or the various subfields of the discipline.	UG	LE	Lecture
Spring 2008	URS491	491	Nonprofit Admin Ind Proj	URS	Urban Affairs	1	Various topics such as board development, risk management, volunterr management, volunterr management, and program planning.	UG	LE	Lecture
Spring 2008	URS492	492	Urban Affairs Internship	URS	Urban Affairs	4	Senior-level internship in which students work in the offices of a local public agency.	UG	IN	Internship
Spring 2008	URS599	599	Studies Selected Subjects	URS	Urban Affairs	4	Deals with problems, approaches, and topics in the field of urban studies. Topics vary.	GR	LE	Lecture
Spring 2008	URS612	612	Cities and Technology	URS	Urban Affairs	4	Cities and technology deals with the evolving relationship between technology and urban growth, physical form, government, and politics. Explores how technological fixes for complex urban problems have shaped urban development and politics.	GR	LE	Lecture
Spring 2008	URS613	613	Legal Environment of PA	URS	Urban Affairs	4	Examines the constitutional context of public administration and administrative rulemaking. Topics include local rules and codes, the administrative appeals process, and sunshine and public records laws.	GR	LE	Lecture

Spring 2008	URS614	614	Public Fiscal Admin	URS	Urban Affairs	4	Examines local fiscal institutions and introduces analytical tools for designing and evaluating fiscal policies. Reviews financial reporting and accounting, the municipal bond market, pension systems, state and local taxes, user charges, and intergovernmental relations.	GR	LE	Lecture
Spring 2008	URS615	615	Community Develop I	URS	Urban Affairs	4	Focuses on the importance, the profession, and the practice of community development. Introduces theories of community and development and studies current neighborhood programs and policies.	GR	LE	Lecture
Spring 2008	URS616	616	Community Develop II	URS	Urban Affairs	4	Examines three fundamental organizing strategies-self-help, technical assistance, and conflict-which are used to improve a community's quality of life. The course combines classroom learning and field observation.	GR	LE	Lecture
Spring 2008	URS617	617	Urban Labor Relations	URS	Urban Affairs	4	Examines collective bargaining, the negotiation process, impasse resolution, and contract and grievance administration in local government.	GR	LE	Lecture

Spring 2008	URS618	618	Urban Public Wrks Admin	URS	Urban Affairs	4	Examines the community's infrastructure with an emphasis on capital improvements programming. Reviews the community's development of the street system, water and sewer systems, solid waste management, and code enforcement.	GR	LE	Lecture
Spring 2008	URS620	620	Public Safety Admin	URS	Urban Affairs	4	Policing, corrections, fire, emergency medical services, and emergency management systems will be surveyed to provide an understanding of the services offered, technologies used, problems faced, and alternatives available in each of the areas.	GR	LE	Lecture
Spring 2008	URS621	621	Comparative Public Admin	URS	Urban Affairs	4	Investigates changes in public administration in the USA and internationally that are caused by globalization and urbanization. The changes relate to organizational structure, functions, partnerships and values.	GR	LE	Lecture
Spring 2008	URS623	623	Issues in Metro Admin	URS	Urban Affairs	4	Courses taught under this title explore issues and topics related to the administration of urban nonprofit organizations, community development agencies, and local governments in	GR	LE	Lecture

Spring 2008	URS624	624	Issues in Metro Planning	URS	Urban Affairs	4	Various issues related to planning urban environments. Topics include housing, funding non-profit organizations, strategic planning, vision planning, and economic development action plans. Titles vary.	GR	LE	Lecture
Spring 2008	URS625	625	Issues in Metro Develop	URS	Urban Affairs	4	Explores issues that impact urban development such as housing, pollution, or privatization. Emphasizes an approach for understanding the issues and formulating effective responses.	GR	LE	Lecture
Spring 2008	URS627	627	Urban Policy Analysis	URS	Urban Affairs	4	(Also listed as PLS 427/627.) Study of the policy development process and its relationship to past and current urban issues. The course focuses on a current urban issue through discussion, reading, and research.	GR	LE	Lecture
Spring 2008	URS630	630	Public Social Svc Transp	URS	Urban Affairs	4	This course addresses essential transportation policy and concepts designed to help Ohio's public administrators, nonprofit administrators, transportation managers, and other professionals understand public and social service transportation demand and basic challenges of mobility.	GR	LE	Lecture

Spring 2008	URS631	631	Rural Urban Pub Transit	URS	Urban Affairs	4	This course addresses essential passenger transportation practices designed to help public administrators, social service managers, transit administrators, and other professionals understand and work with the operational realities of urban and rural public transportation.	GR	LE	Lecture
Spring 2008	URS632	632	Transit Fiscal Reg Mgmt	URS	Urban Affairs	4	This course addresses transit system financial management and regulatory compliance. Subject matter includes components of operating and capital budgets, financial reporting and monitoring, risk m	GR	LE	Lecture
Spring 2008	URS650	650	Ethics in Public Serv	URS	Urban Affairs	4	Systematic development of ethics in public service, including individual roles and obligations, values, standards, and codes of conduct.	GR	LE	Lecture
Spring 2008	URS655	655	Strategic Planning	URS	Urban Affairs	4	Addresses the theory and practice of strategic thinking, planning, and management in public and nonprofit organizations.	GR	LE	Lecture
Spring 2008	URS670	670	Public & NP Leadership	URS	Urban Affairs	4	Study of urban government leadership and community decision making. Major theories and concepts of leadership behavior within organizations and macro studies of urban community power systems.	GR	LE	Lecture

Spring 2008	URS675	675	Mgt of Urban Nonprofit	URS	Urban Affairs	4	Examines the organizational and managerial foundations of nonprofit organizations. Areas such as the nature and mission of nonprofit organizations, strategies for achieving the mission, roles involved, evaluating performance, resource development/fundraising, and managing volunteers are explored.	GR	LE	Lecture
Spring 2008	URS676	676	Fundraising/Grant Write	URS	Urban Affairs	4	Examines the concepts and processes fundamental to fundraising and grant writing. Students learn about the use tools, techniques and skills needed to raise funds and write grant proposals.	GR	LE	Lecture
Spring 2008	URS677	677	Philanthropy	URS	Urban Affairs	4	Introduction to the field of Philanthropy; its history and its place in democratic society. Students will be engaged in the practice and administration of philanthropic organizations.	GR	LE	Lecture
Spring 2008	URS678	678	Managing Volunteer Org	URS	Urban Affairs	4	Study of the knowledge and skills needed by individuals managing volunteers. Components include volunteer recruitment; training; motivation and retention; risk management; the volunteer program evaluation.	GR	LE	Lecture

Spring 2008	URS690	690	Special Topics	URS	Urban Affairs	1	Advanced study in selected topics in urban studies. Topics may include new developments in methodology or the various subfields of the discipline.	GR	LE	Lecture
Spring 2008	URS691	691	Nonprofit Admin Ind Proj	URS	Urban Affairs	1	Various topics such as board development, risk management, volunteer management, and program planning.	GR	LE	Lecture
Spring 2008	URS700	700	Environ of Public Admin	URS	Urban Affairs	4	Examines the legal and political variables that affect the management and operation of local governments with special emphasis on Ohio.	GR	LE	Lecture
Spring 2008	URS701	701	Stats for Public Manager	URS	Urban Affairs	4	Analysis and interpretation of statistics required in public management and policy analysis with emphasis on multivariate statistical techniques.	GR	LE	Lecture
Spring 2008	URS701L	701L	URS Lab	URS	Urban Affairs	0		UG	LB	Lab
Spring 2008	URS702	702	Urban Organ'l Theory	URS	Urban Affairs	4	Analysis of the fundamental behavior concepts and processes involved in public section organizations. Evaluation of approaches to major behavioral issues such as motivation, leadership, and management development.	GR	LE	Lecture

Spring 2008	URS703	703	Public & Non-Profit Budg	URS	Urban Affairs	4	Focuses on the budget at the city level. Structural influences on the budget process are discussed. Different budget techniques are analyzed and critqued.	GR	LE	Lecture
Spring 2008	URS704	704	Public Planning	URS	Urban Affairs	4	Reviews concepts, theories, and practices of community development and planning. Evaluation of current developments in the field with special emphasis on implementation strategies.	GR	LE	Lecture
Spring 2008	URS705	705	Public Human Res Admin	URS	Urban Affairs	4	Examines personnel functions such as job evaluation, recruitment and selection, performance appraisal, compensation, training, labor relations, and affirmative action.	GR	LE	Lecture
Spring 2008	URS706	706	Res Methods in Pub Admin	URS	Urban Affairs	4	Focuses on different aspects of policy evaluation by obtaining facts and analyzing information on impact of public programs. Deals with controversy over the use of objective performance indicators and citizen surveys as program performance measures.	GR	LE	Lecture
Spring 2008	URS707	707	Quant Analysis/Publ Mgrs	URS	Urban Affairs	4	Survey of the methodologies and concepts for analyzing the efficiency and effectiveness of decision-making, information management, and processes of the public organization.	GR	LE	Lecture

Spring 2008	URS708	708	Capstone Research Project	URS	Urban Affairs	4	Capstone research project for the master's degree in urban administration.	GR	LE	Lecture
Spring 2008	URS709	709	Urban Research Project	URS	Urban Affairs	4	Research project for the master's degree in Urban Administration.	GR	LE	Lecture
Spring 2008	URS723	723	Urban Internship	URS	Urban Affairs	4	One quarter supervised internship of at least 200 hours in a selected urban government or agency, arranged in consultation with student's advisor or intern director. Graded pass/unsatisfactory.	GR	IN	Internship
Spring 2008	URS791	791	Urban Intership	URS	Urban Affairs	4	One quarter supervised internship of at least 200 hours in a selected urban government or agency, arranged in consultation with student's advisor or intern director. Graded pass/unsatisfactory.	GR	IN	Internship
Spring 2008	URS793	793	Direct Study in Urban Admin	URS	Urban Affairs	4	If previous knowledge and/or experience in a selected core course is demonstrated, then URS 793 may be substituted for that selected core course.	GR	LE	Lecture
Spring 2008	URS799	799	Urban Thesis	URS	Urban Affairs	4	Under the supervision of a thesis committee and chair, students select an urban administration problem, prepare a proposal detailing the research question, complete the research, write their thesis with full documentation and defend their work before the committee.	GR	IS	Independent Study

Spring 2008	UVC100	100	College Study Strategies	UVC	University College	1	Offers how-to advice on topics such as note taking, time management, preparing for exams, textbook skills, memory training, library usage, etc. Individual and group study/counseling offered as time permits. Graded pass/unsatisfactory. (Previously listed as UD 100.)	UG	LE	Lecture
Spring 2008	UVC101	101	First Year Seminar I	UVC	University College	2	Interactive presentation and discussion of college student life and adjustment issues, academic strategies, academic requirements and information, organization of the university, and career development. (Previously listed as UD 101.)	UG	SE	Seminar
Spring 2008	UVC102	102	First Year Seminar II	UVC	University College	1	Continuation of UVC 101. Extends learning community participation. Uses students first quarter experience to further facilitate adjustments to college. Graded pass/unsatisfactory.	UG	SE	Seminar
Spring 2008	UVC103	103	Community Connections	UVC	University College	2	Connects students with the community through service learning to further facilitate college adjustment and develop foundations for lifelone service. Introduces concepts of community, citizenship, service and social issues being addressed by partnering community organizations.	UG	SE	Seminar

Spring 2008	UVC104	104	Critical Reading	UVC	University College	3	Critical analysis of content area readings. Emphasis on: recognizing organizational patterns; distinguishing fact from opinion; problem solving; logical reasoning; recognizing author's background, intent, attitude, bias and tone; making inferences; recognizing propaganda and persuasive writing.	UG	LE	Lecture
Spring 2008	UVC107	107	Stress Mgt & Relax Techn	UVC	University College	2	Helps students learn how to manage stress better by using applications from cognitive psychology and experiential training in well established techniques. Graded pass/unsatisfactory.	UG	LE	Lecture
Spring 2008	UVC110	110	Returning to Learning	UVC	University College	2	Recommended for the nontraditional student who is beginning or reentering to college after a long absence. Topics include time management, reading for content, note taking, test taking, test anxiety, stress management, and making learning fun. Graded pass/unsatisfactory.	UG	SE	Seminar
Spring 2008	UVC111	111	First Year Interest Group	UVC	University College	0	Learning community students who participate in programs addressing unique issues my participate in Friday Interest Groups. Meeting once per week, Visions students will learn tips for success on a majority campus, for example.	UG	SE	Seminar

Spring 2008	VOE401	401	Bus/Mkt Ed Practicum	VOE	Vocational Education	1	Designed to give the student valuable work experience in an actual marketing environment while being supervised/directed by a business or marketing educator.	UG	IN	Internship
Spring 2008	VOE402	402	Field Experience I	VOE	Vocational Education	1	Students will be observing the 29 competencies required by the Division of Vocational and Career Education in a vocational laboratory setting.	UG	IN	Internship
Spring 2008	VOE403	403	Field Experience II	VOE	Vocational Education	1	Students will be observing the 29 competencies required by the Division of Vocational and Career Education in vocationally related classes.	UG	IN	Internship
Spring 2008	VOE404	404	Field Experience III	VOE	Vocational Education	1	Students will be observing the 29 competencies required by the Division of Vocational and Career Education in applied academic classes.	UG	IN	Internship
Spring 2008	VOE405	405	Field Experience IV	VOE	Vocational Education	1	Students will be observing the 29 competencies required by the Division of Vocational and Career Education and will be placed in vocationally funded employability and entrepreneurship classes.	UG	IN	Internship

Spring 2008	VOE406	406	Survey Workforce Ed	VOE	Vocational Education	3	An overview of the instructional programs in workforce education and their administration at the national, state, and local levels. Current legislation, school-to-work initiatives, tech prep, and trends affecting workforce programs are addressed and explored.	UG	LE	Lecture
Spring 2008	VOE407	407	Transition to Work	VOE	Vocational Education	3	The selection, implementation, and evaluation of school-to-work transition models in organizing and managing work and community-based education programs. Topics include career information resources, curriculum materials, and trends influencing work and careers.	UG	LE	Lecture
Spring 2008	VOE410	410	Laws & Regulations	VOE	Vocational Education	3	An analysis and discussion of the federal and state laws as they affect the local school agency in operating vocational education programs.	UG	LE	Lecture
Spring 2008	VOE411	411	Wkforce Clsrm/Lab Mgt	VOE	Vocational Education	3	Discusses strategies for selection and arrangement of learning activities in the classroom and laboratory setting, procedures for safety, handling and storage of materials and supplies, student personnel systems, records and reports, maintenance of equipment, rotation of assignments, and student evaluation.	UG	LL	Lecture/Lab Combination

Spring 2008	VOE412	412	School-Comm Relations	VOE	Vocational Education	3	A study of the role of the vocational school in the community including vocational school publics, theories of community power structure, and the vocational school with emphasis on methods of communication.	UG	LE	Lecture
Spring 2008	VOE418	418	Hst & Phil Fnds of VOE	VOE	Vocational Education	3	Provides an introduction to the historical and philosophical antecedents to the present day vocational and technical education. It examines social influences which have affected legislation which supports vocational and technical education. Basic principles are introduced. Current trends and issues in vocational, technical, and career education are examined.	UG	LE	Lecture
Spring 2008	VOE421	421	Classrm Mgt Workforce Ed	VOE	Vocational Education	3	Current practice and innovation in the study of discipline models and their application in the classroom. Topics include the legal implications of classroom management.	UG	LE	Lecture
Spring 2008	VOE431	431	Evaluation of Workforce Ed	VOE	Vocational Education	3	Evaluation of student learning and performance including forms of measurement and interpretation of data.	UG	LE	Lecture

Spring 2008	VOE451	451	Intro Workforce Educ	VOE	Vocational Education	3	Provides students with a foundation for teaching workforce education competencies, philosophy, and instructional organization. Development of integrated workforce instructional plans is a major emphasis.	UG	LE	Lecture
Spring 2008	VOE456	456	Voc Student Organization	VOE	Vocational Education	3	An analysis of vocational youth organizations with emphasis on planning and conducting such programs.	UG	LE	Lecture
Spring 2008	VOE458	458	Selct & Org Wkforce Curr	VOE	Vocational Education	3	Provides workforce educators the competencies necessary to identify, select, and organize curricular models and resources to develop a program course of study.	UG	LE	Lecture
Spring 2008	VOE463	463	Meth Incorp Acad Skls	VOE	Vocational Education	3	An analysis of occupational tasks and competency lists to identify related math, science, or communication skills necessary to succeed as workers in modern society. Includes methods of teaching academics as applied to work or laboratory skills or operations.	UG	LL	Lecture/Lab Combination
Spring 2008	VOE469	469	Coordination Techniques	VOE	Vocational Education	3	Effective coordination strategies and procedures in the administration and management of cooperative programs in high schools, and in adult and postsecondary education.	UG	LE	Lecture

Spring 2008	VOE470	470	Workshop Voc Ed	VOE	Vocational Education	1	Intensive practical study in vocational education.	UG	LE	Lecture
Spring 2008	VOE471	471	Intro Workforce Teaching	VOE	Vocational Education	8	The development of basic cognitive and performance skills in pedagogy required by new workforce teachers to earn a vocational teacher license.	UG	LL	Lecture/Lab Combination
Spring 2008	VOE472	472	Supervise Teaching I	VOE	Vocational Education	3	Development of basic knowledge, skills, and attitudes required for vocational certification of new, noncertified vocational teachers.	UG	IN	Internship
Spring 2008	VOE473	473	Supervise Teaching II	VOE	Vocational Education	3	Development of basic knowledge, skills, and attitudes required for vocational certification of new non-certified vocational teachers.	UG	IN	Internship
Spring 2008	VOE474	474	Supervise Teaching III	VOE	Vocational Education	3	Devopment of basic knowledge, skills and attitudes required for vocational certification of new, non-certified vocational teachers.	UG	IN	Internship
Spring 2008	VOE475	475	Wrkforce Follow-Up Wrkshp	VOE	Vocational Education	4	Refinement of curriculum development, motivation, leadership, and human relations skills required by employed workforce education teachers.	UG	LL	Lecture/Lab Combination

Spring 2008	VOE476	476	Clinical Project	VOE	Vocational Education	3	Addresses special problem areas associated with motivating students, classroom management, discipline, handicapped and disadvantaged students, teacher liability, teaching and learning principles, instructional strategies, evaluation, advisory committees, curriculum, lesson planning, and/or safety.	UG	IS	Independent Study
Spring 2008	VOE601	601	Bus & Mkt Ed Practicum	VOE	Vocational Education	1	Selected and supervised work experience in an office.	GR	IN	Internship
Spring 2008	VOE611	611	Org/Oper Coop Program	VOE	Vocational Education	3	Designed to present the fundamentals of establishing and operating a cooperative program following state and federal guidelines for at-risk, work/study students.	GR	LE	Lecture
Spring 2008	VOE618	618	Hist/Phil Voc Educ	VOE	Vocational Education	4	Course provides historical and philosophical antecedents to present day workforce education including vocational and technical education. It examines social influences which have affected legislation which supports vocational and technical education.	GR	LE	Lecture

Spring 2008	VOE650	650	Teach Wkfc Ed Programs	VOE	Vocational Education	3	Provides students with an overview of teaching workforce education. Workforce education philosophy, workforce education instructional organization, lesson planning, integrated academics, and workforce classroom/laboratory planning will be presented or implementation in classroom instruction.	GR	LE	Lecture
Spring 2008	VOE664	664	At Risk Students	VOE	Vocational Education	3	Since many of the secondary vocational students are considered at risk, teachers must know and employ the most effective methods and strategies to enhance student achievement. It is imperative that workforce education teachers be able to identify, define, and practice intervention techniques. Alternative methods to teach basic academic skills will be explored.	GR	LE	Lecture
Spring 2008	VOE669	669	Coord Tech in Wkfc Ed	VOE	Vocational Education	3	Effective coordination strategies and procedures in the administration and management of cooperative programs in high schools and in adult and postsecondary education.	GR	LE	Lecture
Spring 2008	VOE670	670	Workshop Voc Ed	VOE	Vocational Education	1	Intensive practical study in vocational education.	GR	LL	Lecture/Lab Combination

Spring 2008	VOE706	706	Survey Workforce Educ	VOE	Vocational Education	3	An overview of the instructional programs in workforce education and their administration at the national, state, and local levels. Current legislation, School-to-Work initiatives, Tech-Prep, and trends affecting workforce education programs are addressed and explored.	GR	LE	Lecture
Spring 2008	VOE723	723	Educ and Workplace	VOE	Vocational Education	4	Designed to assist counselors, teachers, and administrators in implementing an effective Career Guidance Program within their respective schools.	GR	LE	Lecture
Spring 2008	VOE724	724	Bus/Ind Linkages	VOE	Vocational Education	4	Externship program designed to be an action-oriented collaboration with business and industry to establish networks to advance counselor and school-to-work, vocational, tech-prep, and academic teacher learning and professional development in the workplace.	GR	IN	Internship
Spring 2008	VOE725	725	Admin/Sup Workforce Educ	VOE	Vocational Education	3	In-depth study of the principles, theories, and practices in the supervision of vocational education programs.	GR	LE	Lecture

Spring 2008	VOE727	727	Work with Adult Learners	VOE	Vocational Education	4	Information about adult learners in terms of development, learning capabilities, and learning needs is presented. Students will take part in planning and implementing a marketing effort for adult programs.	GR	LE	Lecture
Spring 2008	VOE729	729	Instruct/Evaluate Adult	VOE	Vocational Education	4	Instructional techniques effective with adults are presented to help the student manage the adult instructional process. Evaluating the adult learners' progress in meeting specified objectives is covered.	GR	LE	Lecture
Spring 2008	VOE824	824	Curr Develop Wrkforce Ed	VOE	Vocational Education	3	Comprehensive study of curriculum designs including occupational task analysis, innovations, sequential structuring, preparation and development of teaching units, evaluation, and change in the workforce education programs.	GR	LE	Lecture
Spring 2008	WMS200	200	Women's Studies	WMS	Women's Studies	4	Introduces historical and contemporary feminist thought and explores the importance of gender as a category of analysis to understand social, cultural, political, and economic forces.	UG	LE	Lecture
Spring 2008	WMS200W	200W	Writing in WMS 200	WMS	Women's Studies	0	Required writing component for WMS 200.	UG	LB	Lab

Spring 2008	WMS300	300	Women Multicultural Persp	WMS	Women's Studies	4	Courses will survey special topics in gender history. Topics may include masculinity, femininity, sexuality, family, and women's history. Focus may be on one nation, region, or a comparative perspective.	UG	LE	Lecture
Spring 2008	WMS300 W	300W	Writing in WMS 300	WMS	Women's Studies	0	Required writing component for WMS 300.	UG	LB	Lab
Spring 2008	WMS399	399	St in Selected Subjects	WMS	Women's Studies	4	Problems, approaches, and topics in the field of women's studies. Titles vary. Topics vary. May be taken for letter grade or pass/unsatisfactory. Prerequisite: WMS 200 or permission of instructor.	UG	LE	Lecture
Spring 2008	WMS399 W	399W	Writing in WMS 399	WMS	Women's Studies	0		UG	LB	Lab
Spring 2008	WMS400	400	Women International Persp	WMS	Women's Studies	4	Course will allow intensive analysis of subjects in gender history. Topics may include masculinity, femininity, sexuality, family, and women's history. Focus may be on one nation, region, or a comparative perspective.	UG	LE	Lecture
Spring 2008	WMS400 W	400W	Writing in WMS 400	WMS	Women's Studies	0		UG	LB	Lab
Spring 2008	WMS450	450	Feminist Thought	WMS	Women's Studies	4	An exploration of feminist interpretations and critiques of Western political theory. An examination of the development of contemporary feminist political thought.	UG	LE	Lecture

Spring 2008	WMS450 W	450W	Writing in WMS 450	WMS	Women's Studies	0		UG	LB	Lab
Spring 2008	WMS498	498	Ind Field Experience	WMS	Women's Studies	1	Supervised individual projects that may involve internships with women's organizations or other field experiences. Titles vary. May be taken for letter grade or pass/unsatisfactory. Prerequisite: WMS 200 or permission of instructor.	UG	IN	Internship
Spring 2008	WMS499	499	Independent Study	WMS	Women's Studies	1	Supervised individual research on selected topics. Arranged between students and faculty member directing the study. Titles vary. May be taken for letter grade or pass/unsatisfactory. Prerequisite: WMS 200 or permission of instructor.	UG	IS	Independent Study
Spring 2008	WMS599	599	St in Selected Subjects	WMS	Women's Studies	4	Problems, approaches and topics in the field of women's studies. Topics vary.	GR	LE	Lecture
Spring 2008	WMS650	650	Feminist Thought	WMS	Women's Studies	4	An examination of the development of contemporary feminist thought and critique of Western gender theory.	GR	LE	Lecture
Spring 2008	WMS699	699	Independent Study	WMS	Women's Studies	1	Supervised individual research on selected topics. Arranged between students and faculty member directing the study.	GR	IS	Independent Study
Spring 2008	WOH600	600	Student Initiated Elective	WOH	Women's Health	2		MD	LE	Lecture
Spring 2008	WOH601	601	Intro to Obstetrics/Gynecology	WOH	Women's Health	2		MD	CL	Clinical

Spring 2008	WOH700	700	Women's Health Clerkship	WOH	Women's Health	16		MD	CL	Clinical
Spring 2008	WOH800	800	Student-Initiated Elective	WOH	Women's Health	4		MD	CL	Clinical
Spring 2008	WOH801	801	JI Gynecology	WOH	Women's Health	8		MD	CL	Clinical
Spring 2008	WOH802	802	Gynecology	WOH	Women's Health	8		MD	CL	Clinical
Spring 2008	WOH803	803	Repro Endocrin/Infertility	WOH	Women's Health	8		MD	CL	Clinical
Spring 2008	WOH804	804	Gynecologic Oncology	WOH	Women's Health	8		MD	CL	Clinical
Spring 2008	WOH806	806	JI Obstetrics	WOH	Women's Health	8		MD	CL	Clinical
Spring 2008	WOH807	807	Maternal/Fetal Medicine	WOH	Women's Health	8		MD	CL	Clinical
Spring 2008	WOH812	812	Mgmt, L&D; GYN Surgery	WOH	Women's Health	8		MD	CL	Clinical
Spring 2008	WOH813	813	International Women's Health	WOH	Women's Health	8		MD	CL	Clinical
Spring 2008	WOH900	900	Extramural	WOH	Women's Health	4		MD	H	Hospital